

FILE HISTORY

US 6,574,638

PATENT: 6,574,638

INVENTORS: Gustman, Samuel
DeLury, Barbara

TITLE: Method and apparatus for cataloguing
multimedia data using surveying data

APPLICATION
NO: US2000659987A

FILED: 12 SEP 2000

ISSUED: 03 JUN 2003

COMPILED: 13 OCT 2014

Jc853 U.S. PTO
09/659987



707	Class	Subclass	ISSUE CLASSIFICATION
104.1			

PATENT NUMBER
6574638

6574638

U.S. UTILITY Patent Application

O.I.P.E. SCANNED <i>AC</i> <i>904</i> Q.A. <i>12</i>	PATENT DATE JUN 03 2003
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APPLICATION NO.	CONT/PRIOR	CLASS	SUBCLASS	ART UNIT	EXAMINER
09/659987		707	104.1	2175	<i>Mizrahi</i>

APPLICANTS
TITLE

Samuel Gustman
Barbara DeLury

Method and apparatus for cataloguing multimedia data using surveying data

ISSUING CLASSIFICATION					
ORIGINAL		CROSS REFERENCE(S)			
CLASS	SUBCLASS	CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)		
707	104.1	707	102	10	
INTERNATIONAL CLASSIFICATION					
G06F	17/30				

Continued on Issue Slip Inside File Jacket

<input checked="" type="checkbox"/> TERMINAL DISCLAIMER	DRAWINGS			CLAIMS ALLOWED	
	Sheets Drwg. <i>23</i>	Figs. Drwg. <i>24</i>	Print Fig. <i>1A</i>	Total Claims <i>26</i>	Print Claim for O.G. <i>1</i>
<input type="checkbox"/> The term of this patent subsequent to _____ (date) has been disclaimed.	 _____ (Assistant Examiner) _____ (Date) 			NOTICE OF ALLOWANCE MAILED	
<input checked="" type="checkbox"/> The term of this patent shall not extend beyond the expiration date of U.S. Patent. No. <i>6,212,527</i>				ISSUE FEE <i>(w)</i>	
	DIANE D. MIZRAHI PRIMARY PATENT EXAMINER TECHNOLOGY CENTER 2100 <i>[Signature]</i> (Primary Examiner)			Amount Due <i>1280.00</i>	Date Paid <i>3-31-03</i>
<input type="checkbox"/> The terminal _____ months of this patent have been disclaimed.	<i>A. White</i> (Legal Instruments Examiner)			ISSUE BATCH NUMBER	
	<i>12/23/02</i> (Date)			<i>11/5/03</i> (Date)	

WARNING:

The information disclosed herein may be restricted. Unauthorized disclosure may be prohibited by the United States Code Title 35, Sections 122, 181 and 368. Possession outside the U.S. Patent & Trademark Office is restricted to authorized employees and contractors only.

Form P10-436A
(Rev. 6/99)

FILED WITH: DISK (CRF) FICHE CD-ROM

(Attached in pocket on right inside flap)

ISSUE FEE IN FILE

(FACE)

6,574,638

**METHOD AND APPARATUS FOR CATALOGUING MULTIMEDIA
DATA USING SURVEYING DATA**

TRANSACTION HISTORY

Date	Transaction Description
9/12/2000	Initial Exam Team nn
10/2/2000	IFW Scan & PACR Auto Security Review
11/4/2000	Correspondence Address Change
7/2/2001	Application Dispatched from OIPE
7/2/2001	Application Is Now Complete
7/18/2001	Case Docketed to Examiner in GAU
12/3/2001	Case Docketed to Examiner in GAU
1/28/2002	Case Docketed to Examiner in GAU
4/10/2002	Information Disclosure Statement (IDS) Filed
4/10/2002	Information Disclosure Statement (IDS) Filed
6/24/2002	Case Docketed to Examiner in GAU
9/9/2002	Non-Final Rejection
9/11/2002	Mail Non-Final Rejection
12/16/2002	Terminal Disclaimer Filed
12/16/2002	Response after Non-Final Action
12/20/2002	Date Forwarded to Examiner
12/23/2002	Notification of Terminal Disclaimer - Accepted
12/27/2002	Mail Notice of Allowance
12/27/2002	Mail Formal Drawings Required
12/27/2002	Mail Notification of Terminal Disclaimer - Accepted
12/27/2002	Formal Drawings Required
12/27/2002	Notice of Allowance Data Verification Completed
1/15/2003	Dispatch to Publications
1/16/2003	Workflow - File Sent to Contractor
1/16/2003	Receipt into Pubs
2/19/2003	Receipt into Pubs
3/31/2003	Issue Fee Payment Verified
3/31/2003	Workflow - Drawings Finished
3/31/2003	Workflow - Drawings Matched with File at Contractor
3/31/2003	Amendment after Notice of Allowance (Rule 312)

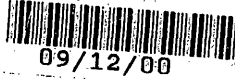
3/31/2003	Applicant Has Filed a Verified Statement of Small Entity Status in Compliance with 37 CFR 1.27
3/31/2003	Workflow - Drawings Received at Contractor
3/31/2003	Workflow - Drawings Sent to Contractor
3/31/2003	Issue Fee Payment Received
4/16/2003	Response to Amendment under Rule 312
4/17/2003	Mail Response to 312 Amendment (PTO-271)
4/22/2003	Application Is Considered Ready for Issue
4/28/2003	Receipt into Pubs
5/14/2003	Issue Notification Mailed
6/3/2003	Recordation of Patent Grant Mailed
6/3/2003	Patent Issue Date Used in PTA Calculation
2/16/2011	Petition Entered
4/15/2011	Mail-Petition Decision - Granted
4/15/2011	Petition Decision - Granted

PATENT APPLICATION



09659987

JC853 U.S. PTO
09/659987



09/12/00

INITIALS _____

SEP 27 00 26

CONTENTS

	Date Received (Incl. C. of M.) or Date Mailed	Date Received (Incl. C. of M.) or Date Mailed
1. Application _____ papers.		42.
2. <i>for in deeffa</i>	<i>11-6</i>	43.
3. <i>Doc. Fee, charge Address</i>	<i>6-11-01</i>	44.
4. <i>Ex Time</i>	<i>6-11-01</i>	45.
5. <i>IDS</i>	<i>04.10.02</i>	46.
6. <i>Req 3</i>	<i>9-11-02</i>	47.
7. <i>Req. for Reexam. ^{CM} 12/16/02</i>	<i>12/16/02</i>	48.
8. <i>Terminal Withdraw</i>	<i>12/16/00</i>	49.
9. <i>Allowance</i>	<i>12.29.02</i>	50.
4-16-03 10. <i>Small Entity</i>	<i>3-31-03</i>	51.
4-16-03 11. <i>AMDT. A</i>	<i>3-31-03</i>	52.
12. <i>NOTICE OF ENTRY</i>	<i>4-16-03</i>	53.
4/24/03 13. <i>Form Drawings 22 sheet set</i>	<i>13/3/03</i>	54.
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POSITION	INITIALS	ID NO.	DATE
FEE DETERMINATION	JR	7533	
O.I.P.E. CLASSIFIER	FS	8	9-27-00
FORMALITY REVIEW	SK	7175	11-4
RESPONSE FORMALITY REVIEW	SK	809	7-2-01

INDEX OF CLAIMS

- ✓ Rejected
- = Allowed
- (Through numeral) ... Canceled
- ÷ Restricted
- N Non-elected
- I Interference
- A Appeal
- O Objected

Claim	Final	Original	Date
1	1	1	
2	2	2	
3	3	3	
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If more than 150 claims or 10 actions staple additional sheet here

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SEARCHED

Class	Sub.	Date	Exmr.
707	102 103R 104.1	9/7/02	DM
↓		↓	↓
updated search		12/23/02	DM

SEARCH NOTES (INCLUDING SEARCH STRATEGY)

Inventor Search	Date	Exmr.
USPTO	9/7/02	DM
USPG	↓	↓
NPL		
EPO		
JPO		
Derwent		
IBM Tech		
Double Patenting		
updated search	10/23/02	DM
	↓	↓

INTERFERENCE SEARCHED

Class	Sub.	Date	Exmr.
707	102 10	12/23/02	DM
↓		↓	↓
707	104.1	↓	↓

(RIGHT OUTSIDE)



Generate Collection Print

Search Results - Record(s) 1 through 12 of 12 returned.

1. Document ID: US 20020120927 A1

L1: Entry 1 of 12

File: PGPB

Aug 29, 2002

PGPUB-DOCUMENT-NUMBER: 20020120927
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020120927 A1

TITLE: Broadcasting system and an information broadcast receiving terminal apparatus used therein

PUBLICATION-DATE: August 29, 2002

INVENTOR-INFORMATION:

Table with 5 columns: NAME, CITY, STATE, COUNTRY, RULE-47. Rows include Harada, Takenosuke; Machida, Kazuhiro; Kandaka, Isao; Usui, Akira.

US-CL-CURRENT: 725/23; 705/26, 725/32, 725/60

Navigation table with columns: Full, Title, Citation, Front, Review, Classification, Date, Reference, Sequences, Attachments, Claims, KWIC, Draw Desc, Image.

2. Document ID: US 20020116272 A1

L1: Entry 2 of 12

File: PGPB

Aug 22, 2002

PGPUB-DOCUMENT-NUMBER: 20020116272
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020116272 A1

TITLE: Advertising strategy and motivational behavior modification method for weight loss

PUBLICATION-DATE: August 22, 2002

INVENTOR-INFORMATION:

Table with 5 columns: NAME, CITY, STATE, COUNTRY, RULE-47. Row includes Szynalski, Alexander Goen; Randolph; NJ; US.

US-CL-CURRENT: 705/14

Navigation table with columns: Full, Title, Citation, Front, Review, Classification, Date, Reference, Sequences, Attachments, Claims, KWIC, Draw Desc, Image.

3. Document ID: US 20020046199 A1

L1: Entry 3 of 12

File: PGPB

Apr 18, 2002

PGPUB-DOCUMENT-NUMBER: 20020046199
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020046199 A1

TITLE: Electronic employee selection systems and methods

PUBLICATION-DATE: April 18, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Scarborough, David J.	West Linn	OR	US	
Chambless, Bjorn	Portland	OR	US	
Becker, Richard W.	Portland	OR	US	
Check, Thomas F.	Beaverton	OR	US	
Clainos, Deme M.	Lake Oswego	OR	US	
Eng, Maxwell W.	Portland	OR	US	
Levy, Joel R.	Portland	OR	US	
Mertz, Adam N.	Portland	OR	US	
Paajanen, George E.	West Linn	OR	US	
Smith, David R.	Beaverton	OR	US	
Smith, John R.	Hillsboro	OR	US	

US-CL-CURRENT: 706/21

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC	Draw Desc
Image											

4. Document ID: US 20020042786 A1

L1: Entry 4 of 12

File: PGPB

Apr 11, 2002

PGPUB-DOCUMENT-NUMBER: 20020042786
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020042786 A1

TITLE: Development of electronic employee selection systems and methods

PUBLICATION-DATE: April 11, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Scarborough, David J.	West Linn	OR	US	
Chambless, Bjorn	Portland	OR	US	
Becker, Richard W.	Portland	OR	US	
Check, Thomas F.	Beaverton	OR	US	
Clainos, Deme M.	Lake Oswego	OR	US	
Eng, Maxwell W.	Portland	OR	US	
Levy, Joel R.	Portland	OR	US	
Mertz, Adam N.	Portland	OR	US	
Paajanen, George E.	West Linn	OR	US	
Smith, David R.	Beaverton	OR	US	
Smith, John R.	Hillsboro	OR	US	

US-CL-CURRENT: 706/21

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMIC	Draw Desc
Image											

5. Document ID: US 20010052122 A1

L1: Entry 5 of 12

File: PGPB

Dec 13, 2001

PGPUB-DOCUMENT-NUMBER: 20010052122
 PGPUB-FILING-TYPE: new
 DOCUMENT-IDENTIFIER: US 20010052122 A1

TITLE: AUTOMATED SURVEY KIOSK

PUBLICATION-DATE: December 13, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
NANOS, NIKITA J.	OTTAWA		CA	
NANOS, JOHN J.	WHITBY		CA	

US-CL-CURRENT: 725/9

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMIC	Draw Desc
Image											

6. Document ID: US 6381744 B2

L1: Entry 6 of 12

File: USPT

Apr 30, 2002

US-PAT-NO: 6381744
 DOCUMENT-IDENTIFIER: US 6381744 B2

TITLE: Automated survey kiosk

DATE-ISSUED: April 30, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Nanos; Nikita J.	Ottawa			CA
Nanos; John J.	Whitby			CA

US-CL-CURRENT: 725/24; 705/27

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMIC	Draw Desc
Image											

7. Document ID: US 5740035 A

L1: Entry 7 of 12

File: USPT

Apr 14, 1998

US-PAT-NO: 5740035

DOCUMENT-IDENTIFIER: US 5740035 A

TITLE: Self-administered survey systems, methods and devices

DATE-ISSUED: April 14, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cohen; Gerald B.	Gaithersburg	MD		
Conley; Louis W.	Gaithersburg	MD		
McConochie; Roberta M.	Annapolis	MD		
Patchen; Robert H.	Bethesda	MD		
Peacock; James D.	Laurel	MD		
Rankin; Claude A.	Columbia	MD		
White; Thomas W.	Annapolis	MD		

US-CL-CURRENT: 705/10; 235/384, 708/140

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMIC	Draw Desc
Image											

8. Document ID: US 5602916 A

L1: Entry 8 of 12

File: USPT

Feb 11, 1997

US-PAT-NO: 5602916

DOCUMENT-IDENTIFIER: US 5602916 A

TITLE: Method and apparatus for preventing unauthorized monitoring of wireless data transmissions

DATE-ISSUED: February 11, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Grube; Gary W.	Palatine	IL		
Markison; Timothy W.	Austin	TX		
Rybicki; Mathew A.	Austin	TX		

US-CL-CURRENT: 380/270

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC	Draw Desc
Image											

9. Document ID: US 5594796 A

L1: Entry 9 of 12

File: USPT

Jan 14, 1997

US-PAT-NO: 5594796

DOCUMENT-IDENTIFIER: US 5594796 A

TITLE: Method and apparatus for detecting unauthorized distribution of data

DATE-ISSUED: January 14, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Grube; Gary W.	Palatine	IL		
Markison; Timothy W.	Austin	TX		
Rybicki; Mathew A.	Austin	TX		

US-CL-CURRENT: 380/270

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC	Draw Desc
Image											

10. Document ID: JP 2001306466 A

L1: Entry 10 of 12

File: JPAB

Nov 2, 2001

PUB-NO: JP02001306466A

DOCUMENT-IDENTIFIER: JP 2001306466 A

TITLE: E-MAIL FOR AUTOMATICALLY SENSING MULTI-MEDIA RECEIVER AND DEVICE FOR PRODUCING THE SAME

PUBN-DATE: November 2, 2001

INVENTOR-INFORMATION:

NAME	COUNTRY
YOSHIDA, KAZUTO	

INT-CL (IPC): G06 F 13/00

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KVMC	Draw Desc
Image											

11. Document ID: JP 04023557 A

L1: Entry 11 of 12

File: JPAB

Jan 27, 1992

PUB-NO: JP404023557A
DOCUMENT-IDENTIFIER: JP 04023557 A
TITLE: MULTI-MEDIUM QUESTIONNAIRE COLLECTING SYSTEM

PUBN-DATE: January 27, 1992

INVENTOR-INFORMATION:

NAME: ISHII, TOSHIO COUNTRY:

US-CL-CURRENT: 379/100.15
INT-CL (IPC): H04M 11/00; G06F 15/28; H04N 1/00

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	RWMC	Draw Desc
Clip Img	Image										

12. Document ID: KR 271347 B1 KR 2000026001 A

L1: Entry 12 of 12

File: DWPI

Nov 1, 2000

DERWENT-ACC-NO: 2001-121105
DERWENT-WEEK: 200139
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TITLE: Survey method using a voice response system and multi mass media - NoAbstract

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	RWMC	Draw Desc
Image											

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Term	Documents
MULTI.DWPI,TDBD,EPAB,JPAB,USPT,PGPB.	661615
MULTIS.DWPI,TDBD,EPAB,JPAB,USPT,PGPB.	42
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MEDIUM.DWPI,TDBD,EPAB,JPAB,USPT,PGPB.	1263680
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SURVA.DWPI,TDBD,EPAB,JPAB,USPT,PGPB.	2
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Display Format:

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WEST

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Search Results - Record(s) 1 through 10 of 10 returned.

1. Document ID: US 20020052861 A1

L5: Entry 1 of 10

File: PGPB

May 2, 2002

PGPUB-DOCUMENT-NUMBER: 20020052861
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020052861 A1

TITLE: Method and apparatus for cataloging multimedia data

PUBLICATION-DATE: May 2, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Gustman, Samuel	Santa Monica	CA	US	

US-CL-CURRENT: 707/1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KM/C	Draw Desc
Image											

2. Document ID: US 20020049604 A1

L5: Entry 2 of 10

File: PGPB

Apr 25, 2002

PGPUB-DOCUMENT-NUMBER: 20020049604
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020049604 A1

TITLE: Method and apparatus for management of multimedia assets

PUBLICATION-DATE: April 25, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Gustman, Samuel	Santa Monica	CA	US	

US-CL-CURRENT: 705/1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KM/C	Draw Desc
Image											

3. Document ID: US 6353831 B1

L5: Entry 3 of 10

File: USPT

Mar 5, 2002

US-PAT-NO: 6353831
DOCUMENT-IDENTIFIER: US 6353831 B1

TITLE: Digital library system

DATE-ISSUED: March 5, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gustman; Samuel	Santa Monica	CA		

US-CL-CURRENT: 707/103R; 707/10, 707/104.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMIC	Draw Desc
Image											

4. Document ID: US 6212527 B1

L5: Entry 4 of 10

File: USPT

Apr 3, 2001

US-PAT-NO: 6212527
DOCUMENT-IDENTIFIER: US 6212527 B1

TITLE: Method and apparatus for cataloging multimedia data

DATE-ISSUED: April 3, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gustman; Samuel	Santa Monica	CA		

US-CL-CURRENT: 707/102; 707/1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMIC	Draw Desc
Image											

5. Document ID: US 6199060 B1

L5: Entry 5 of 10

File: USPT

Mar 6, 2001

US-PAT-NO: 6199060
DOCUMENT-IDENTIFIER: US 6199060 B1

TITLE: Method and apparatus management of multimedia assets

DATE-ISSUED: March 6, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gustman; Samuel	Santa Monica	CA		

US-CL-CURRENT: 707/3; 707/1, 707/104.1, 707/2, 707/4, 707/5, 709/216

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMIC	Draw Desc
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 6. Document ID: US 6092080 A

L5: Entry 6 of 10

File: USPT

Jul 18, 2000

US-PAT-NO: 6092080

DOCUMENT-IDENTIFIER: US 6092080 A

TITLE: Digital library system

DATE-ISSUED: July 18, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gustman; Samuel	Santa Monica	CA		

US-CL-CURRENT: 707/103R; 707/102, 707/3, 707/6

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMIC	Draw Desc
Image											

 7. Document ID: US 5832499 A

L5: Entry 7 of 10

File: USPT

Nov 3, 1998

US-PAT-NO: 5832499

DOCUMENT-IDENTIFIER: US 5832499 A

TITLE: Digital library system

DATE-ISSUED: November 3, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gustman; Samuel	Santa Monica	CA		

US-CL-CURRENT: 707/103R; 707/1, 707/3

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMIC	Draw Desc
Image											

 8. Document ID: US 5832495 A

L5: Entry 8 of 10

File: USPT

Nov 3, 1998

US-PAT-NO: 5832495

DOCUMENT-IDENTIFIER: US 5832495 A

TITLE: Method and apparatus for cataloguing multimedia data

DATE-ISSUED: November 3, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gustman; Samuel	Santa Monica	CA		

US-CL-CURRENT: 707/102; 707/104.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC	Draw Desc
Image											

9. Document ID: US 5813014 A

L5: Entry 9 of 10

File: USPT

Sep 22, 1998

US-PAT-NO: 5813014

DOCUMENT-IDENTIFIER: US 5813014 A

TITLE: Method and apparatus for management of multimedia assets

DATE-ISSUED: September 22, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gustman; Samuel	Santa Monica	CA		

US-CL-CURRENT: 707/103R; 707/1, 707/102, 707/104.1, 707/3, 707/4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC	Draw Desc
Image											

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L5: Entry 10 of 10

File: EPAB

Jan 15, 1998

DOCUMENT-IDENTIFIER: WO 9801850 A2

TITLE: METHOD AND APPARATUS FOR CATALOGUING MULTIMEDIA DATA

Inventor Name (1):

GUSTMAN, SAMUEL

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC	Draw Desc
Image											

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Term	Documents
GUSTMAN.DWPI,EPAB,JPAB,USPT,PGPB.	54
GUSTMEN	0
GUSTMENS	0
GUSTMANS	0
GUSTMAN.INV..USPT,PGPB,JPAB,EPAB,DWPI,TDBD.	10
(GUSTMAN.INV.).USPT,PGPB,JPAB,EPAB,DWPI,TDBD.	10

Display Format: Change Format

[Previous Page](#) [Next Page](#)



US006574638B1

(12) **United States Patent**
Gustman et al.

(10) **Patent No.:** US 6,574,638 B1
(45) **Date of Patent:** *Jun. 3, 2003

(54) **METHOD AND APPARATUS FOR CATALOGUING MULTIMEDIA DATA USING SURVEYING DATA**

(75) **Inventors:** Samuel Gustman, Santa Monica, CA (US); Barbara DeLury, Los Angeles, CA (US)

(73) **Assignee:** Survivors of the Shoah Visual History Foundation, Los Angeles, CA (US)

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 225 days.

This patent is subject to a terminal disclaimer.

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(21) **Appl. No.:** 09/659,987

(22) **Filed:** Sep. 12, 2000

(51) **Int. Cl.⁷** G06F 17/30

(52) **U.S. Cl.** 707/104.1; 707/102; 707/10

(58) **Field of Search** 707/10, 102, 103 R, 707/104.1

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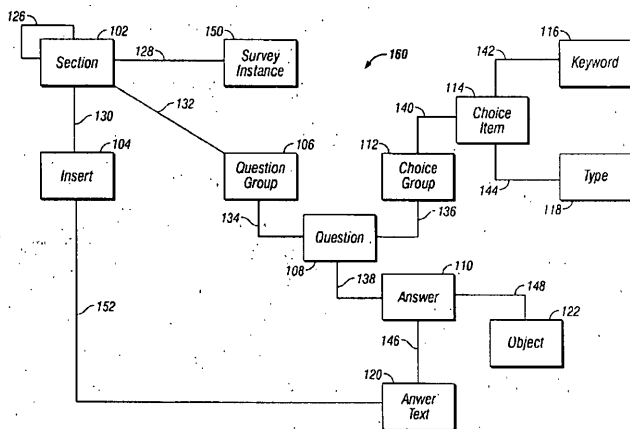
Primary Examiner—Diane D. Mizrahi

(74) *Attorney, Agent, or Firm*—The Hecker Law Group

(57) **ABSTRACT**

A method and apparatus is described wherein survey data collected from different survey versions may be retained in a cohesive data, or knowledge, base that may be used to catalogue multimedia data. A survey schema is defined that comprises survey elements that may be used to define surveys and capture survey data. In one or more embodiments of the invention, survey data may be linked to a multimedia cataloguing system. The linked survey data may be used alone or in combination with the cataloguing system to retrieve multimedia data.

26 Claims, 22 Drawing Sheets



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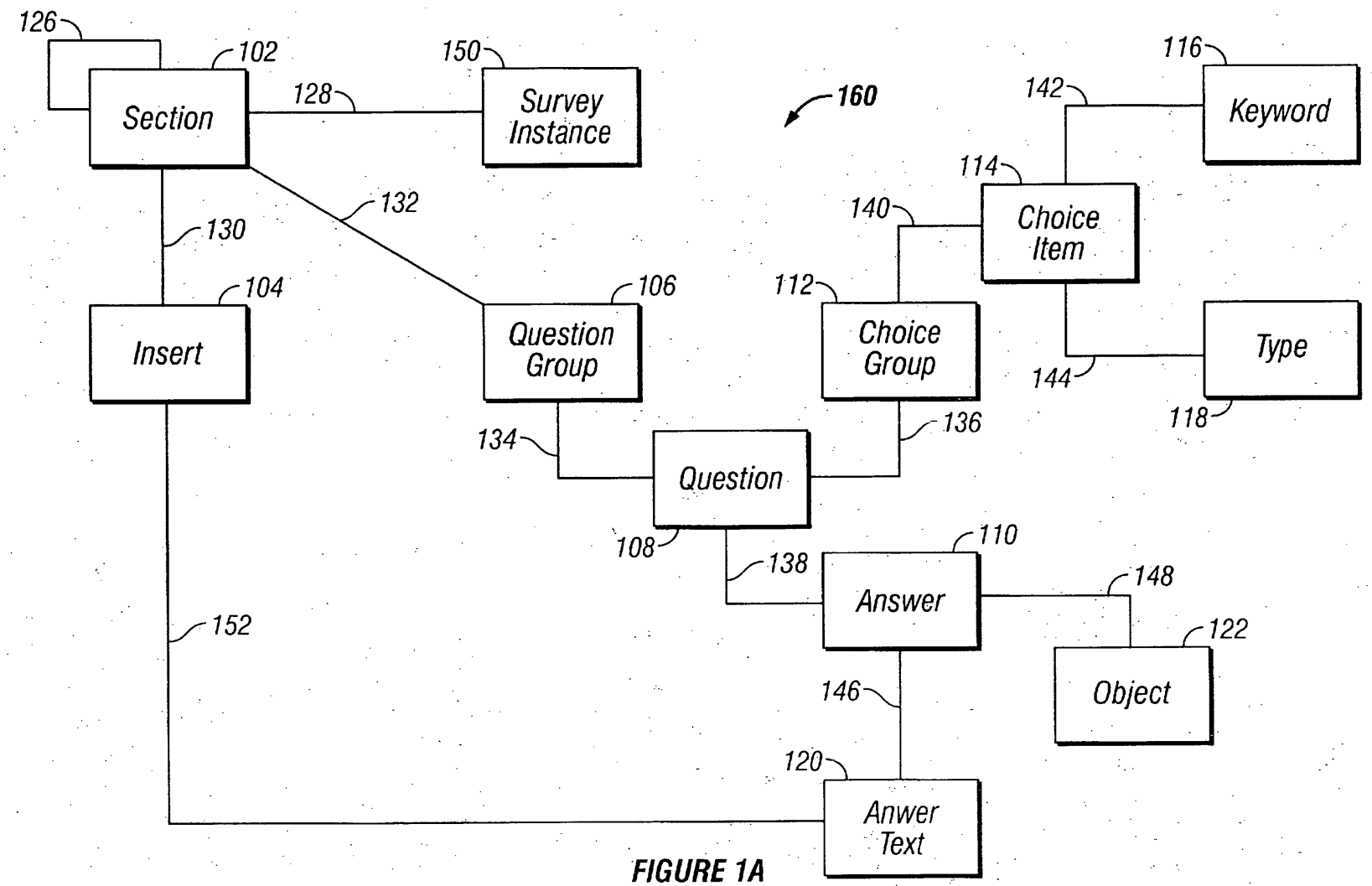


FIGURE 1A

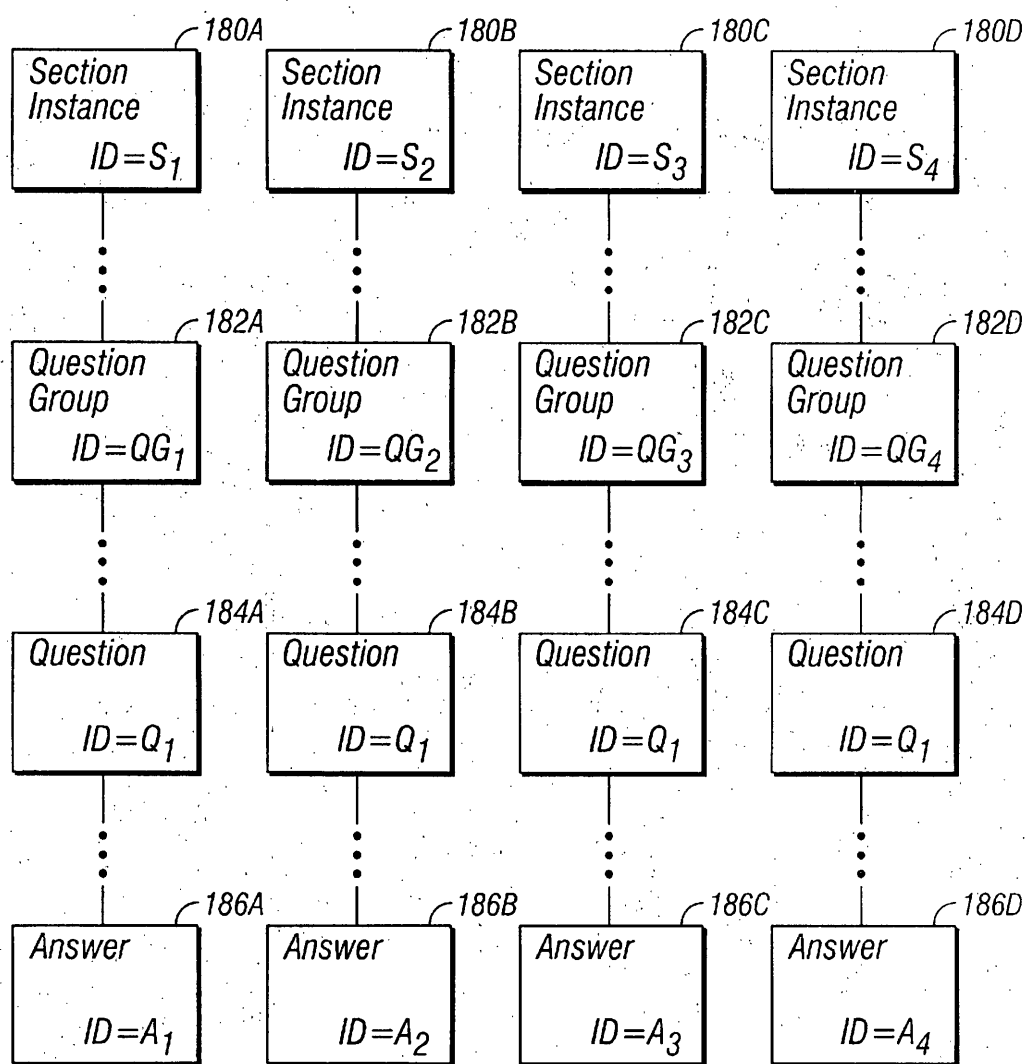


FIGURE 1B

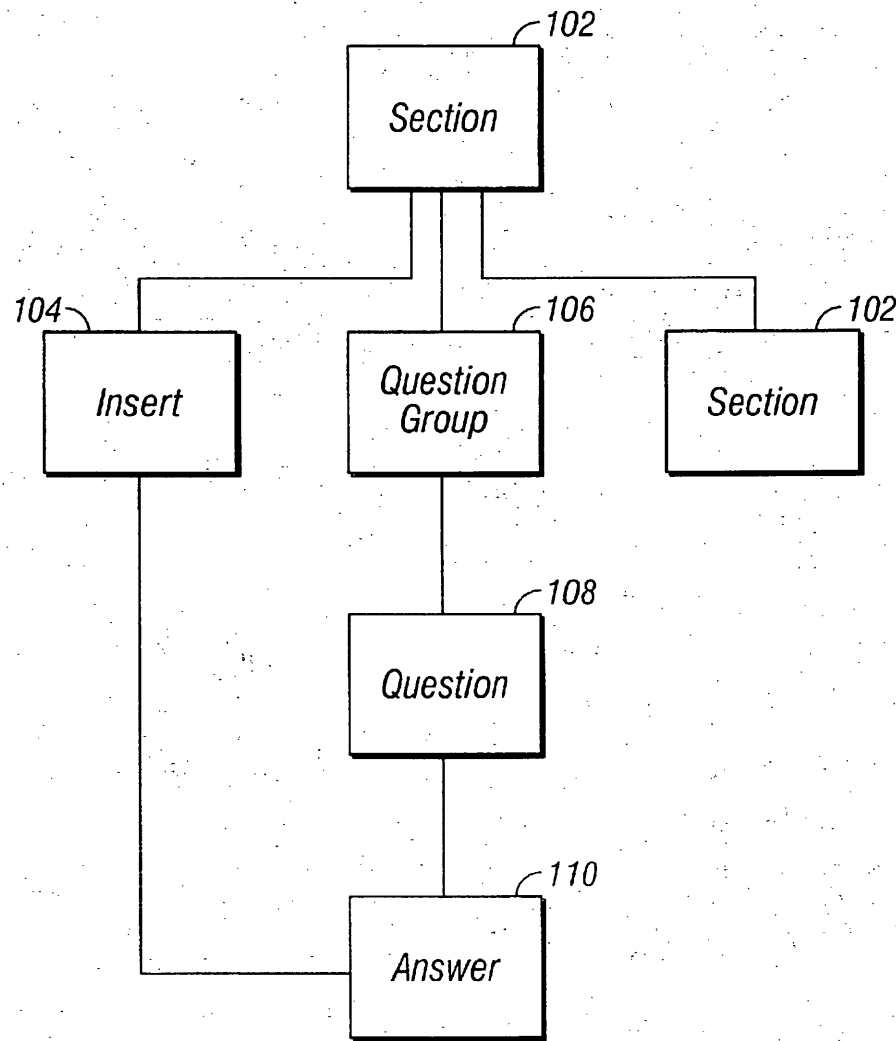


FIGURE 1C

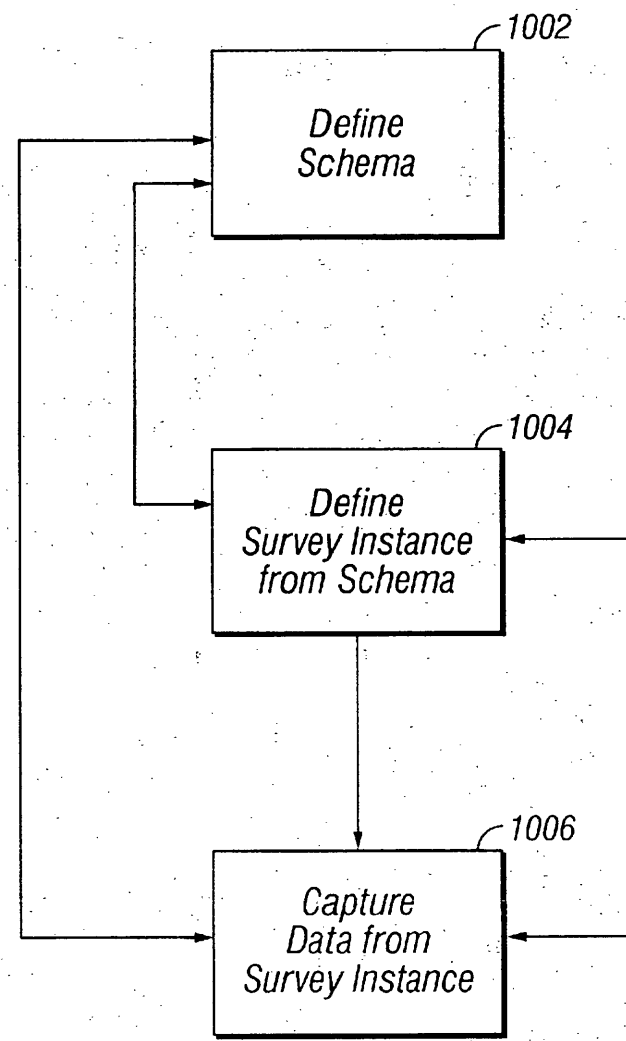


FIGURE 10

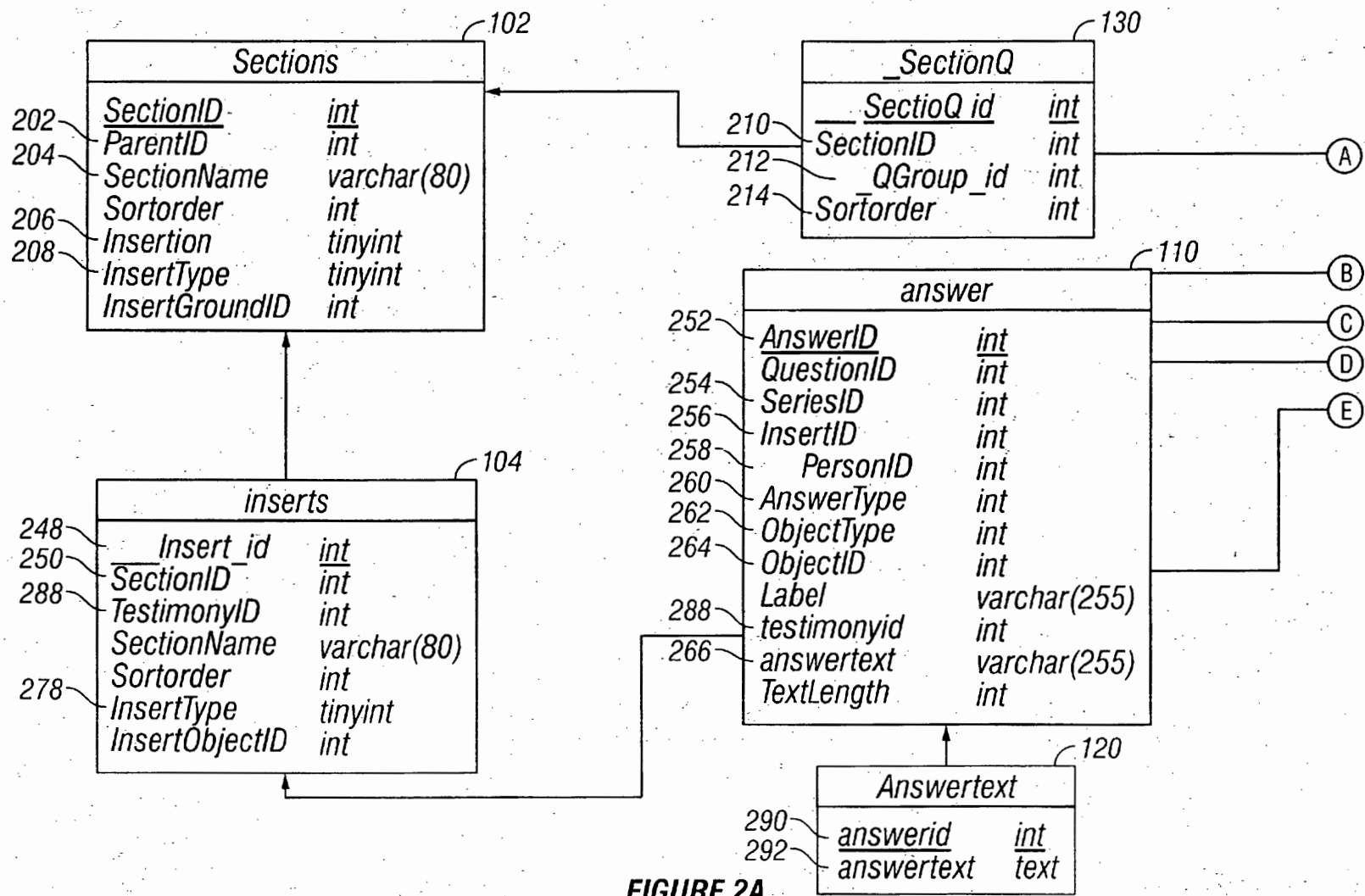


FIGURE 2A

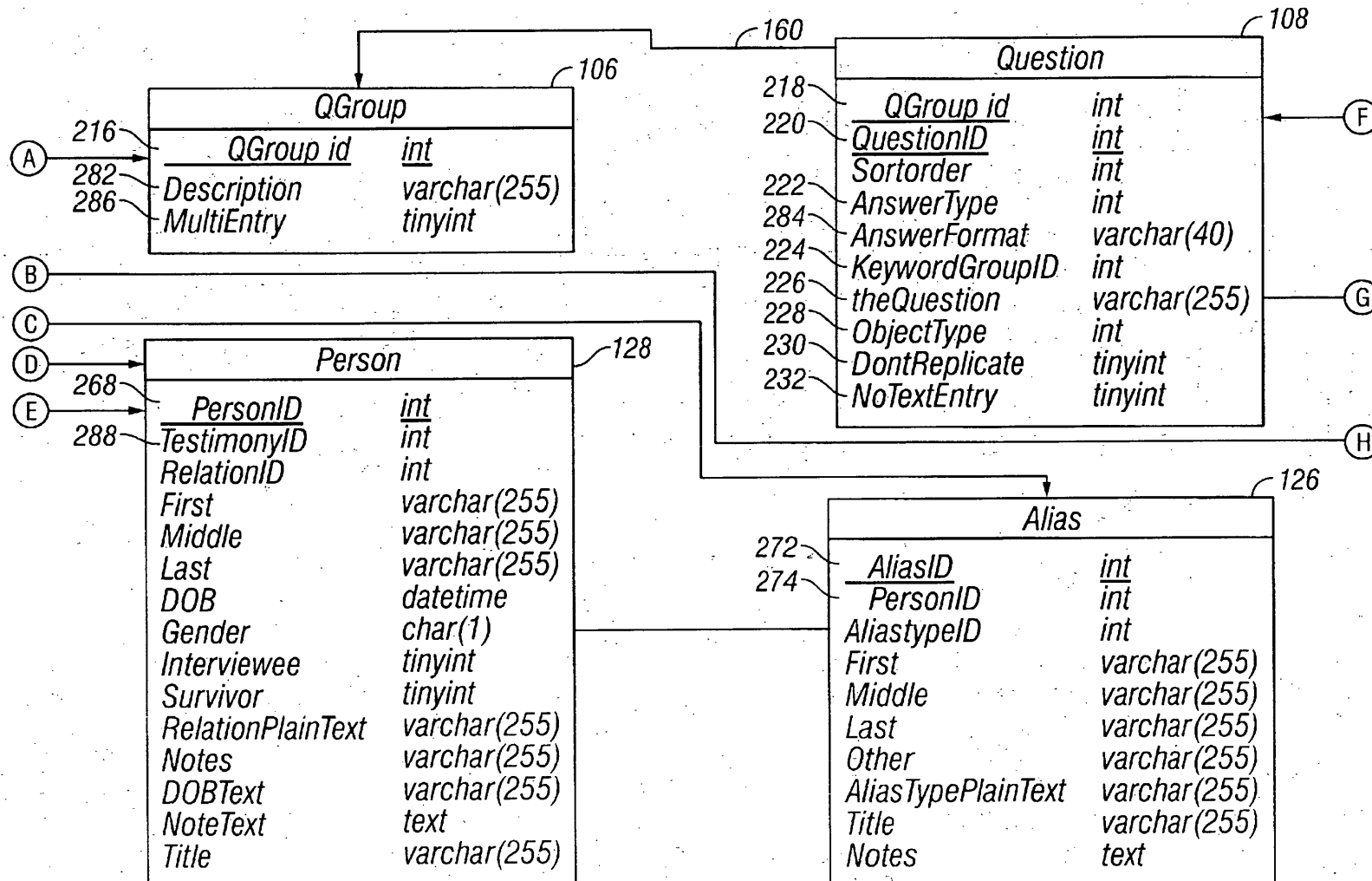


FIGURE 2B

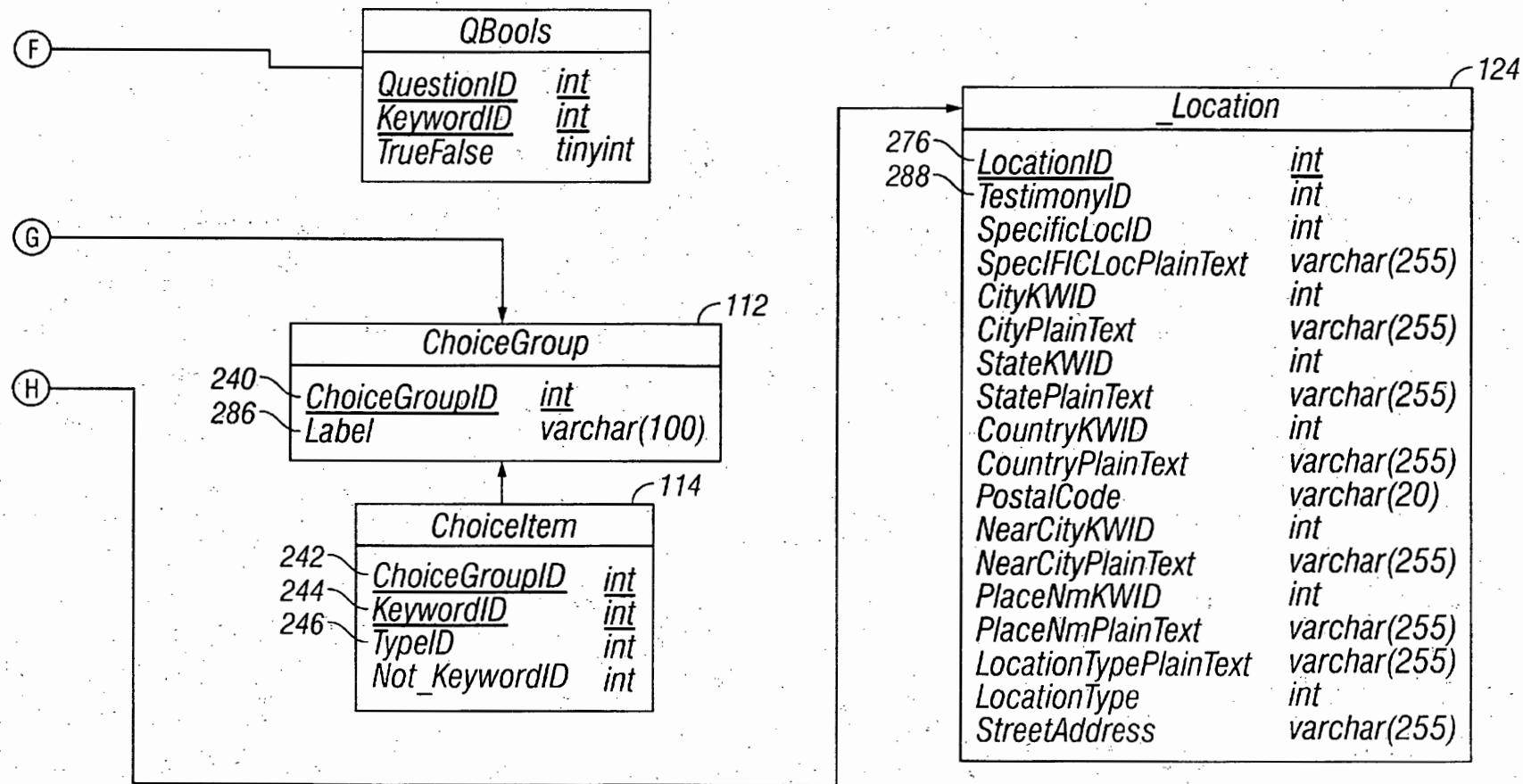


FIGURE 2C

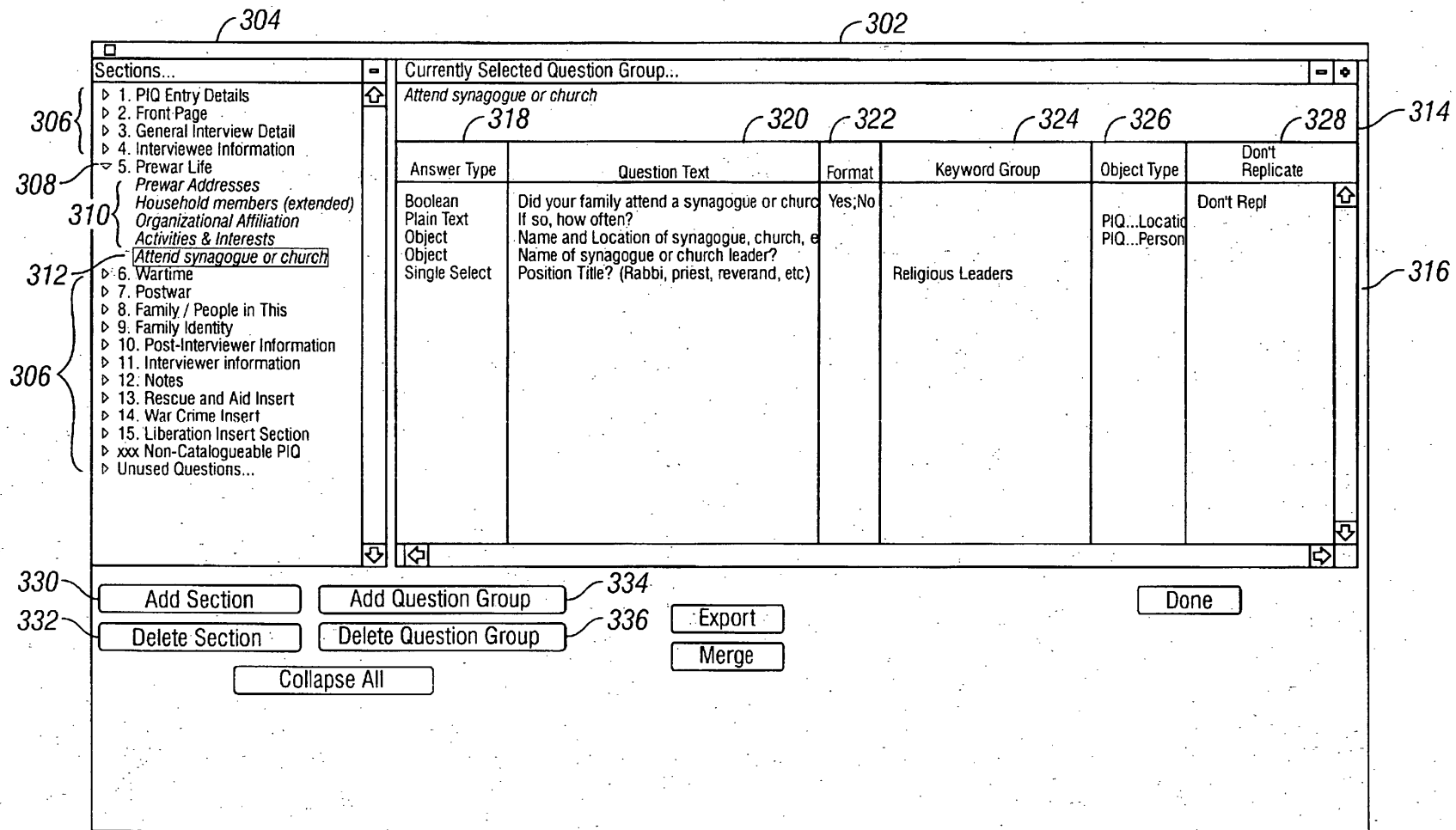


FIGURE 3

A screenshot of a software dialog box titled "ADD SECTION". The dialog box has a title bar with the text "ADD SECTION". Below the title bar, there are several input fields and controls: a "Parent Section" dropdown menu, a "Section Name" text input field, an "Insert" checkbox, and an "Insert Type" dropdown menu. The "Insert" checkbox is currently unchecked. The "Insert Type" dropdown menu is open, showing two options. At the bottom of the dialog box, there are two buttons: "Cancel" and "Save".

402

404

406

412 Insert

408

410

Cancel Save

FIGURE 4A

A screenshot of a software dialog box titled "ADD QUESTION GROUP". The dialog box has a title bar with the text "ADD QUESTION GROUP". Below the title bar, there are several input fields and controls: a "Parent Section" dropdown menu, a "Group Title" text input field, and a "Multi-Entry" checkbox. The "Multi-Entry" checkbox is currently unchecked. At the bottom of the dialog box, there are two buttons: "Cancel" and "Save".

422

424

426

430 Multi-Entry

428

Cancel Save

FIGURE 4B

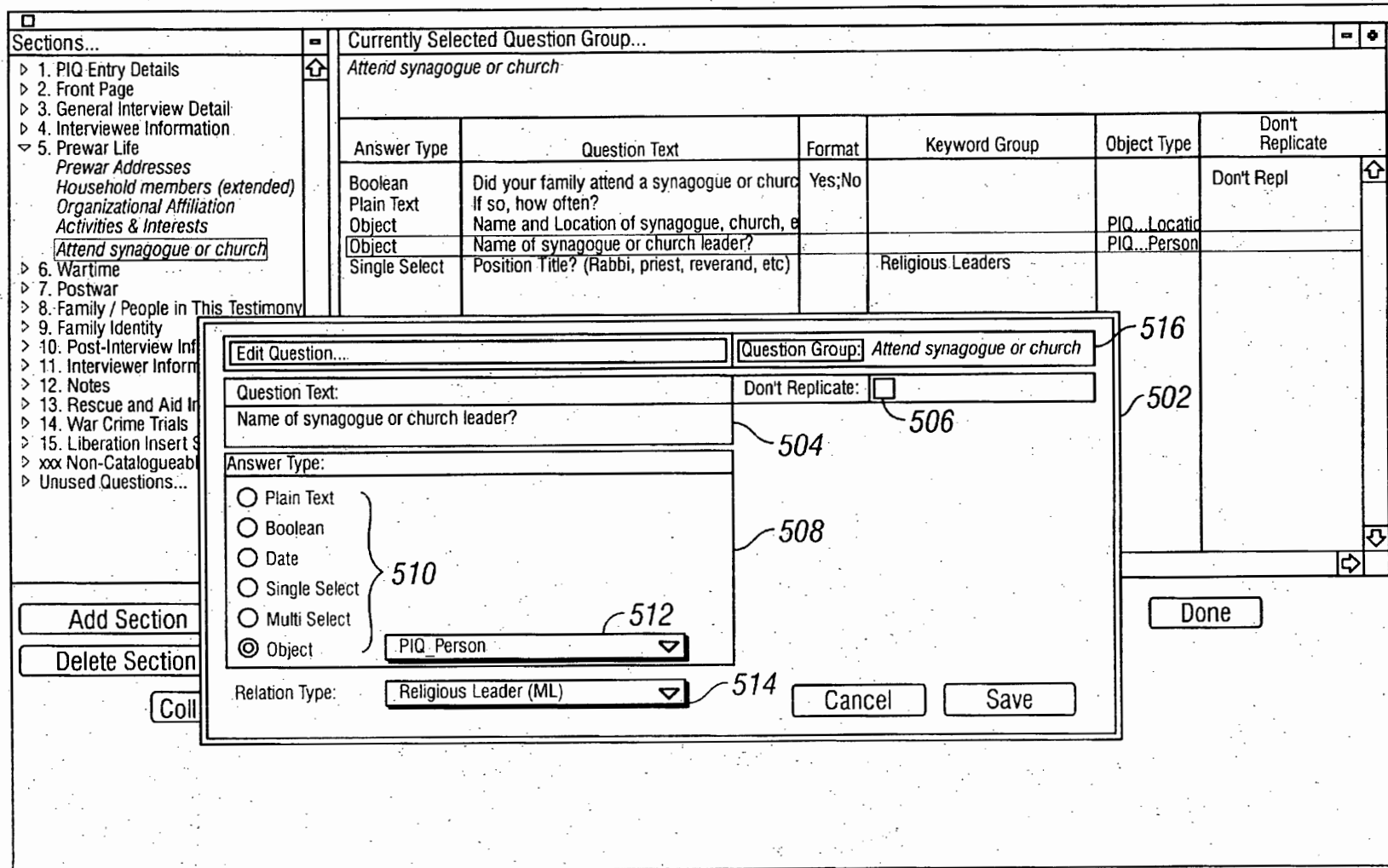


FIGURE 5

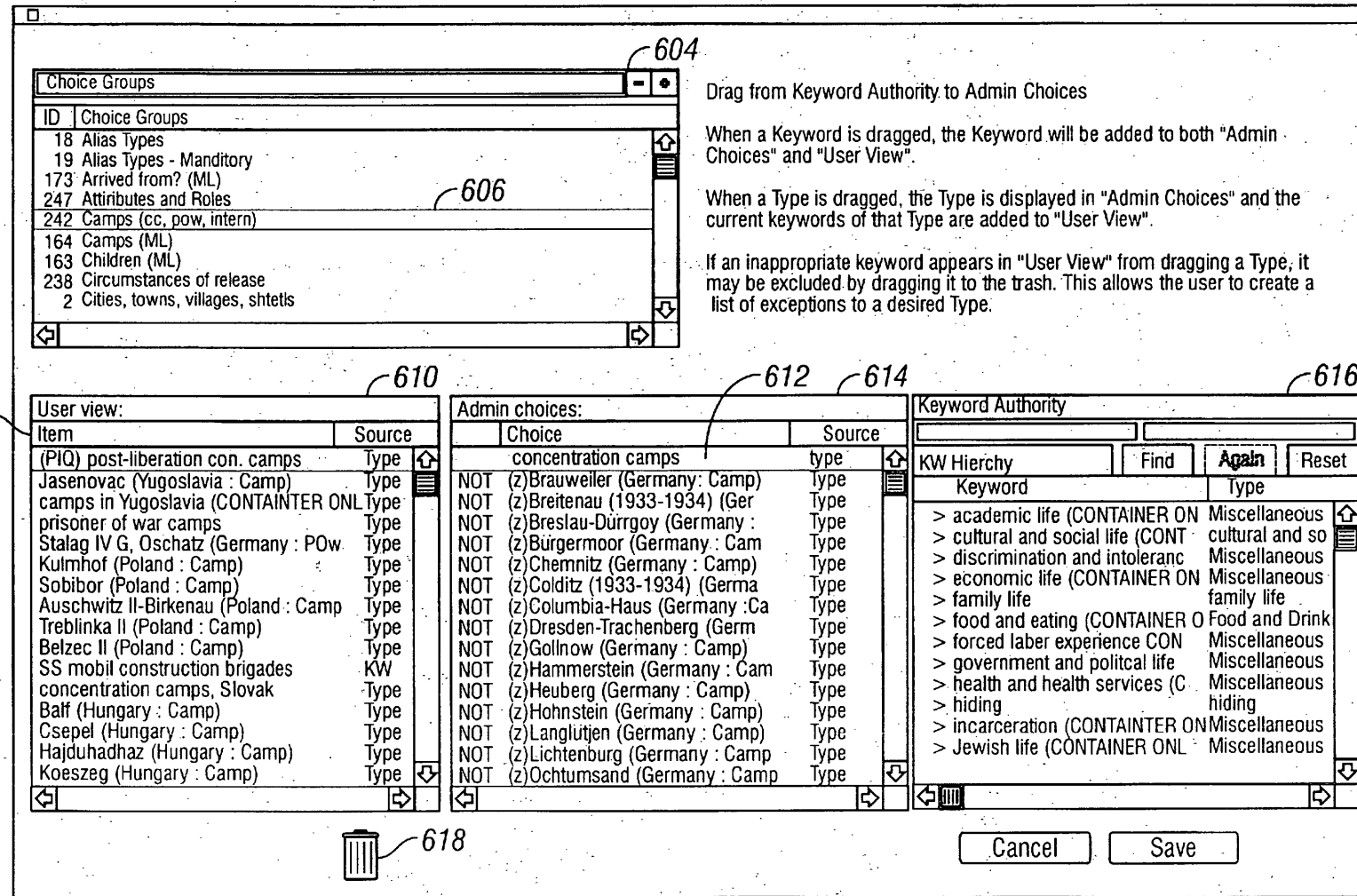


FIGURE 6

Testimony IntCode : 232
Interviewee : Sigi Hart

Sections
Find Reset

- 1. PIQ Entry Details
- 2. Front Page
- 3. General Interview Detail
- 4. Interviewee information
- 5. Prewar Life
 - Prewar Addresses
 - Household members (ext)
 - Organizational Affiliation
 - Activities & Interests
 - Attend synagogue or church
- 6. Wartime
- 7. Postwar
- 8. Family / People in This Te
- 9. Family Identity
- 10. Post-Interviewer Informa
- 11. Interviewer information
- 12. Notes
- 13. Rescue and Aid Insert
- 14. War Crime Trials
- 15. Liberation Insert Section
- xxx Non-Catalogueable PIQ

Keywords

PIQ Choices

Keyword

- Aleksander Rebbes
- Baal Koreh
- Baal Tefilla
- Belzer Rebbes
- cantors
- Hager, Rabbi Menahem Mendel
- Halberstam, Rabbi Yekutiel Juda
- Lubavitcher Rebbes
- minister
- occupations, gabbaim

Add PIQPerson Object

5. Prewar Life : Name of synagogue or church leader? (PIQPerson)

Relation to Interviewee: 704

First:

Middle:

Last:

Title:

Date of Birth:

Gender: Male Female Unspecified

Survivor: Yes No Unspecified 708

Notes About This Person

Instructions : 1) Double-click to start data entry. 2) 'Alias Type' is REQUIRED to save an Alias record.

Alias Type	First	Middle	Last	Title
release name				
release maiden name				
current name				
name at birth				
last name during war				
Hebrew name				
Yiddish name				
maiden name				
nickname				

710

Paste Name <- Highlight a line, then Use this button to paste the PIQ Person's name on the line.

Cancel OK

FIGURE 7

Testimony IntCode : 232
Interviewee : Sigi Hart

Spreadsheet... OK

Sections Collapse All

Find Reset

1. PIQ Entry Details

2. Front Page

3. Survivor Release Enclosed

3. General Interview Details

Name of Interviewee

Date of Pre-Interview & Interview

Intr Location & Home Addr

4. Interviewee Information

5. Prewar Life

Prewar Addresses

Household members (extended family & other)

Organizational Affiliation

Activities & Interests

Attend synagogue or church

6. Wartime

7. Postwar

8. Family / People in This Testimony

9. Family Identity

10. Post-Interviewer Information

11. Interviewer Information

12. Notes

13. Rescue and Aid Insert (name)

14. War Crime Trails

15. Liberation Insert Section

xxx Non-Catalogueable PIQ Questions

Selected Question Group

Name of Interviewee

Question	Answer
Edit Alias to PIQPerson...	
3. General Interview Details: Release Name of interviewee (as appears on Release Form) (PIQAlias)	
Alias for: Sigi Hart	802
First: Sigi	804
Middle:	806
Last: Hart	
Title:	
Alias Type: release name	808
Notes About This Alias	
NOTE: 'Alias Type' is REQUIRED in order to save the record	
Paste Name <input type="button" value="Cancel"/> <input type="button" value="OK"/>	
PIQPerson friends Simon, [Diamond], Mr.	
PIQPerson friends sisters-in-law [Vogel], Michelle,	
PIQPerson aunts [Wulkan], Freidel,	
PIQPerson grandfathers Begleiter,	
PIQPerson grandmothers Begleiter,	
PIQPerson aunts Begleiter, Adela,	
PIQPerson uncles Begleiter, Baruch,	
PIQPerson uncles Begleiter, Isak,	

Keywords

PIQ Choices Find

Keyword

Aleksander Rebbes
Baal Koreh
Baal Tefilla
Belzer Rebbes
cantors
Hager, Rabbi Menahem Mendel Ben Hayyim
Halberstam, Rabbi Yekutiel Judah
Lubavitcher Rebbes
minister
occupations, gabbaim

FIGURE 8

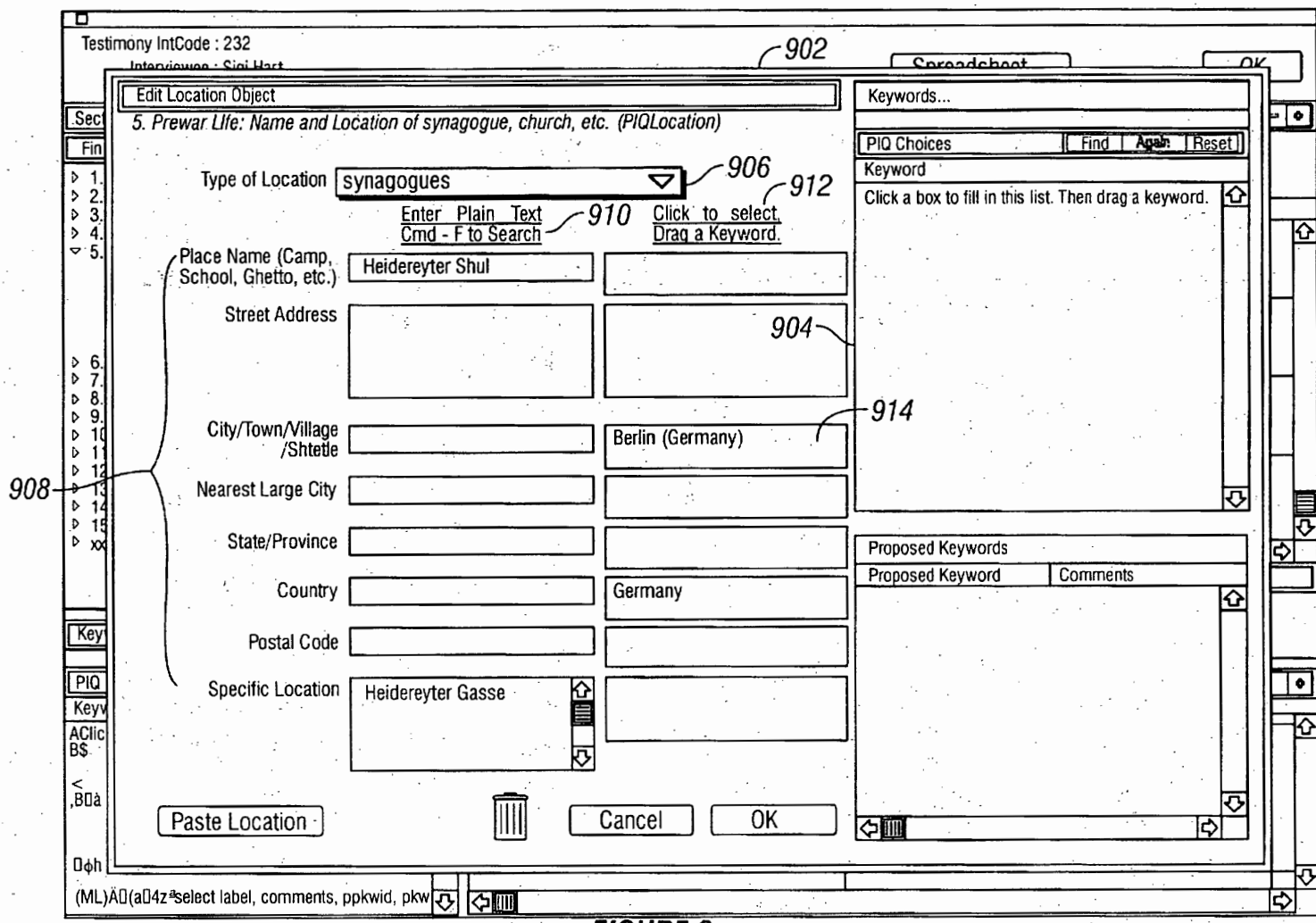


FIGURE 9

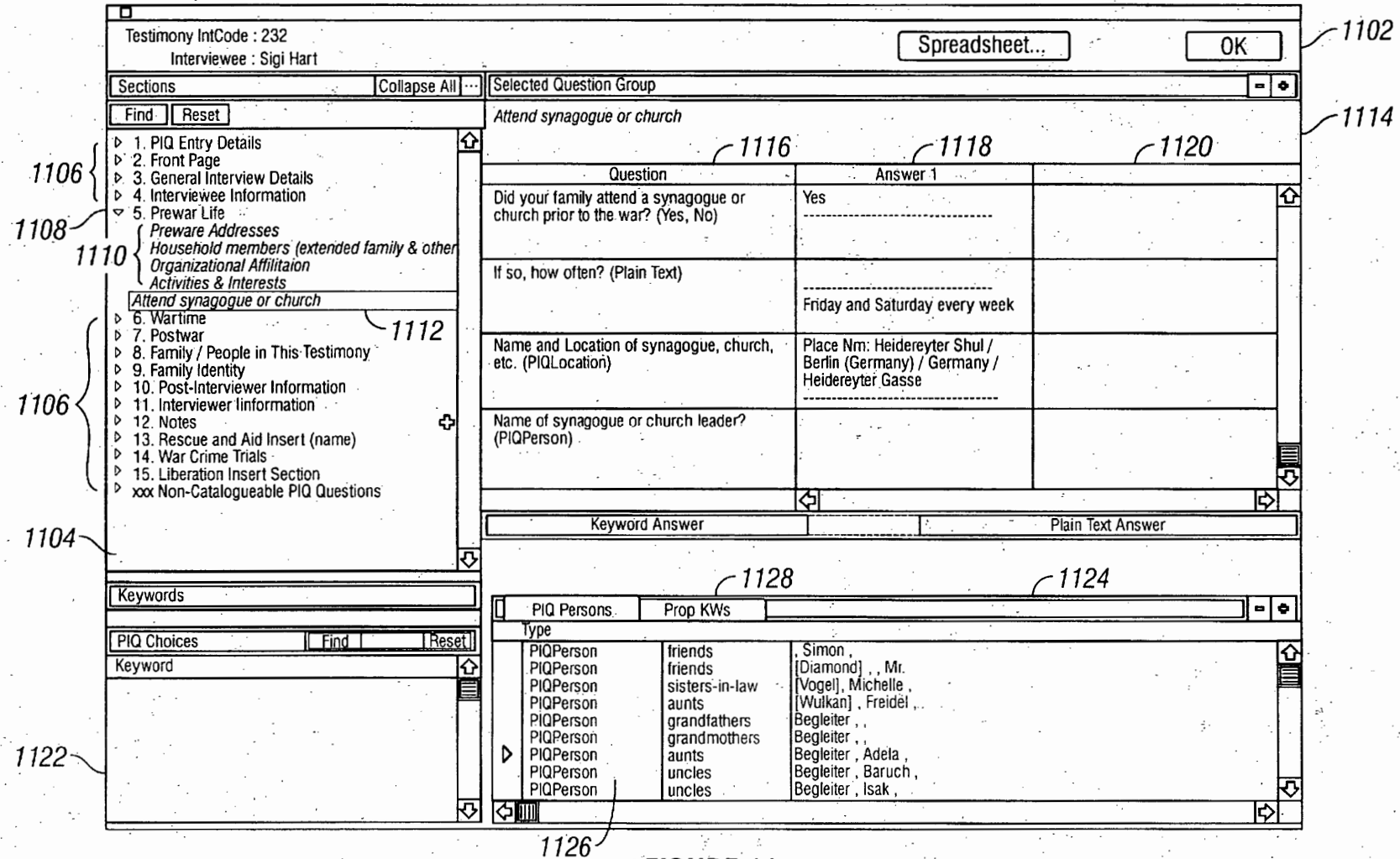


FIGURE 11

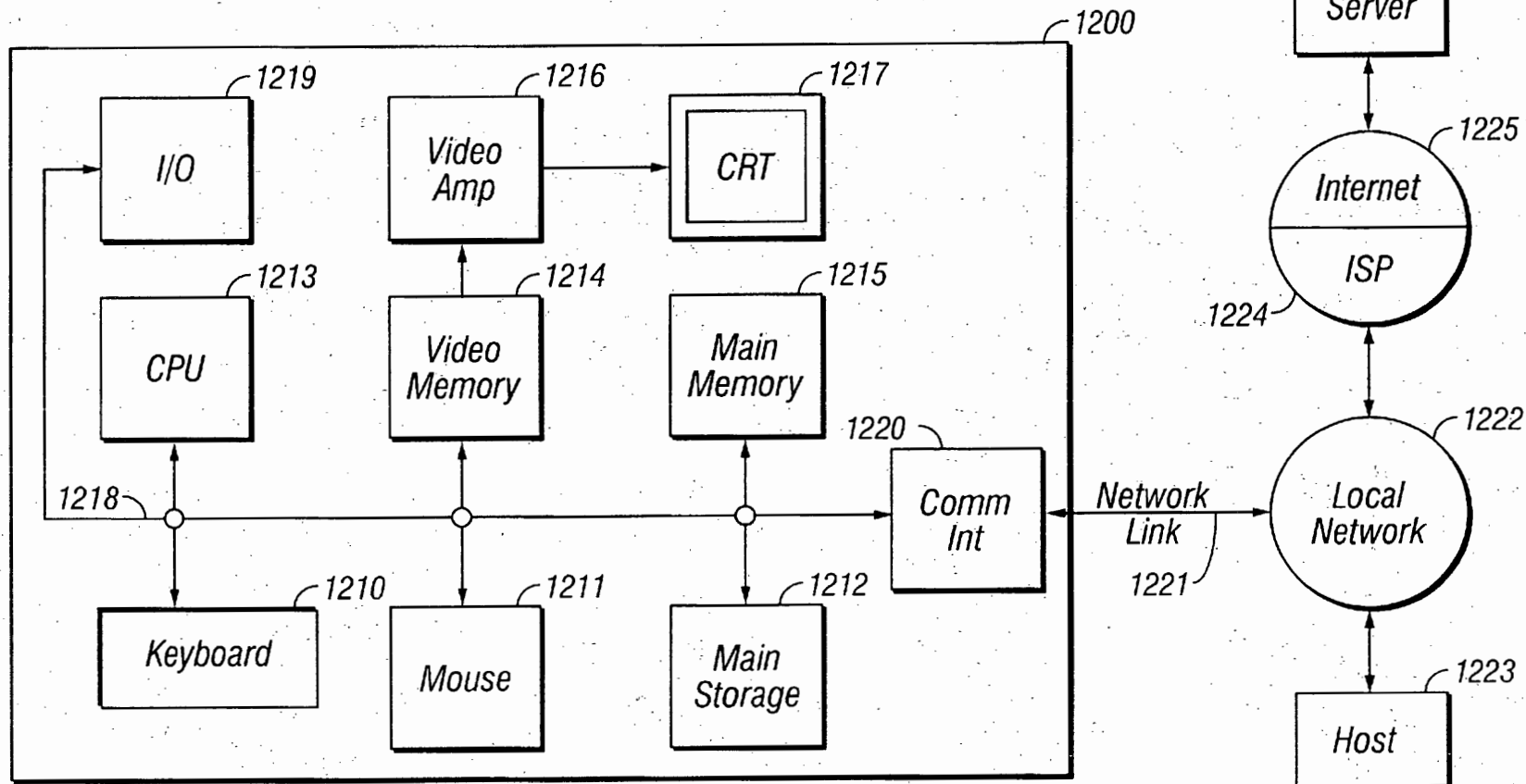


FIGURE 12

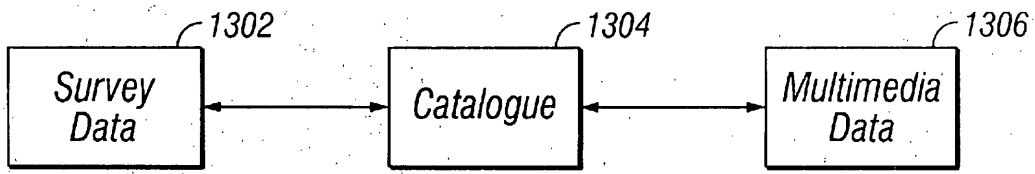


FIGURE 13

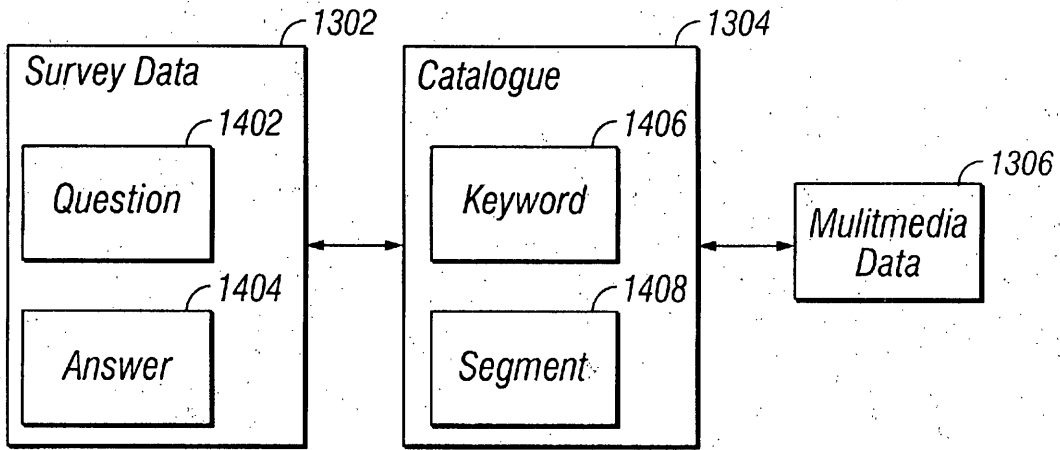


FIGURE 14

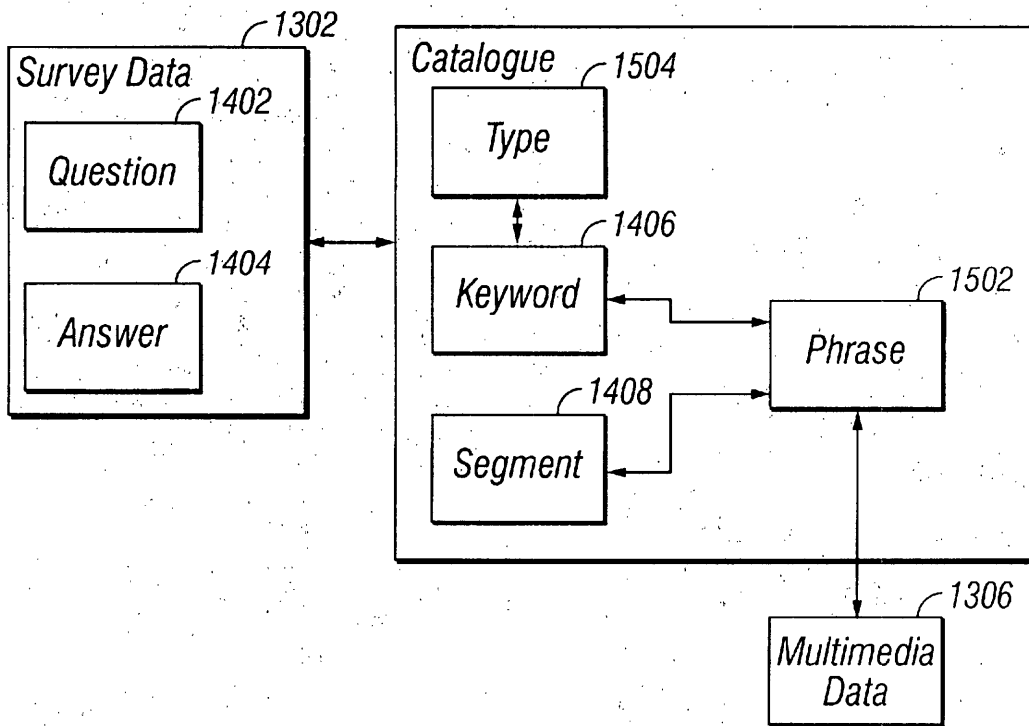


FIGURE 15

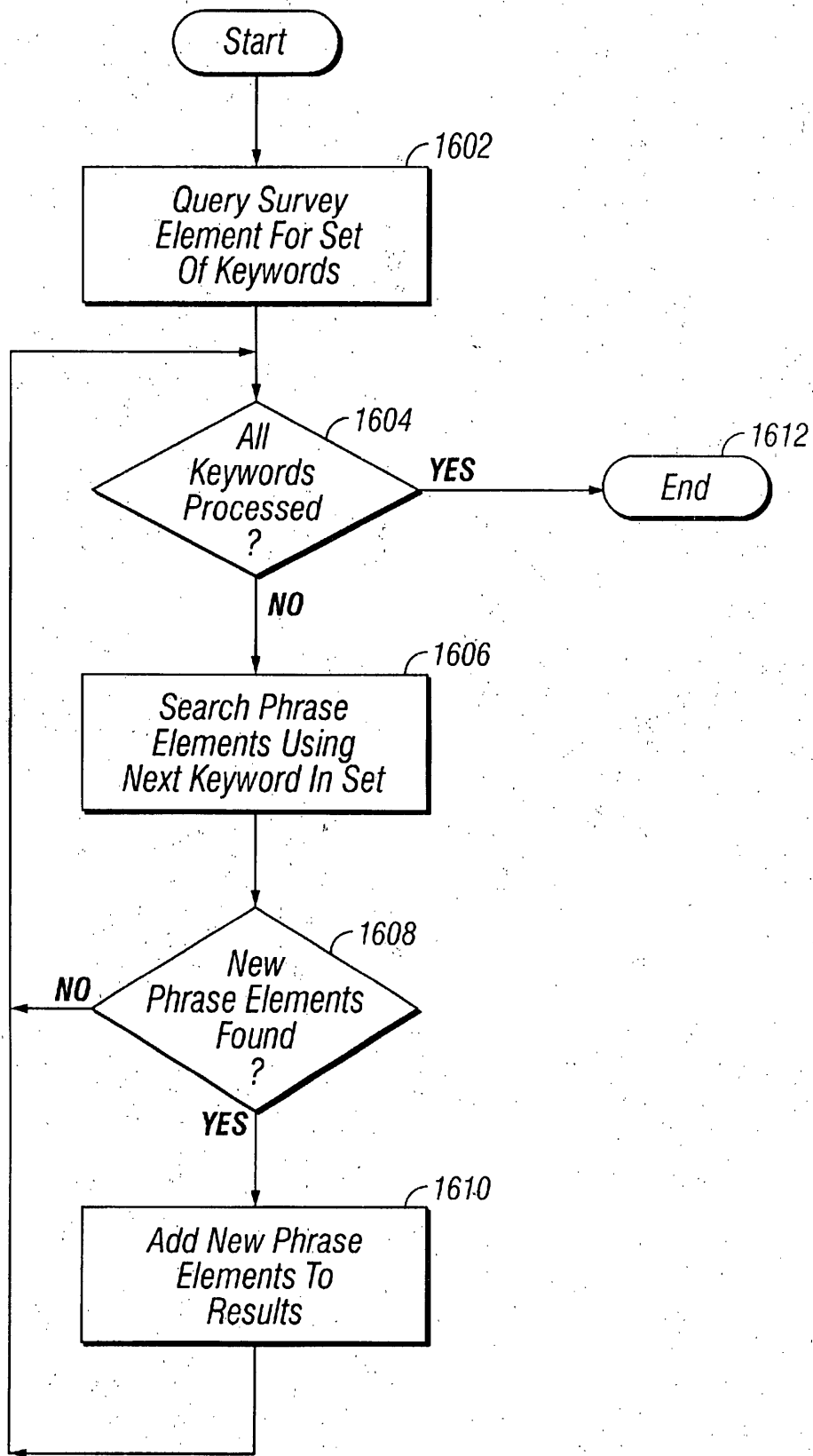


FIGURE 16

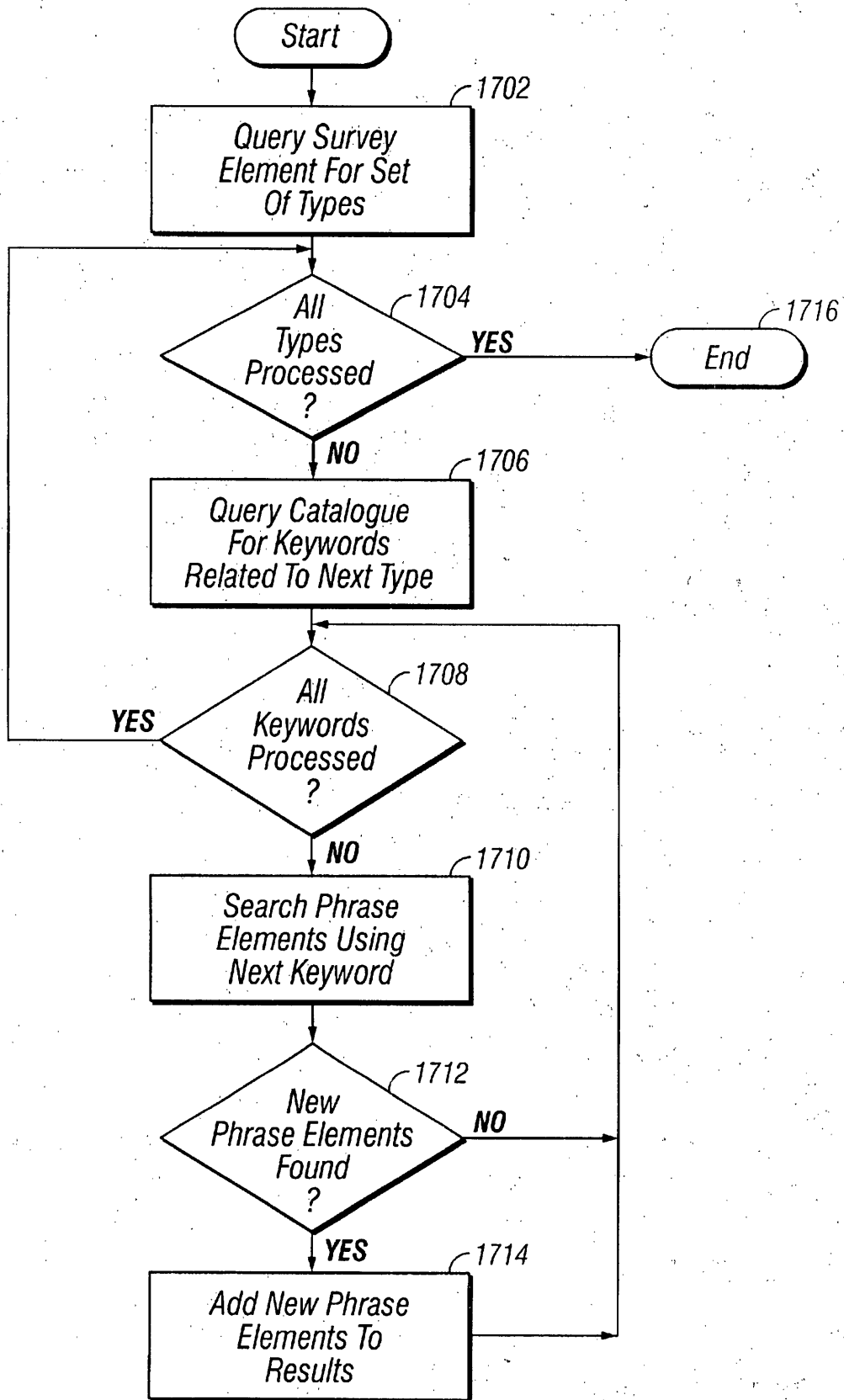


FIGURE 17

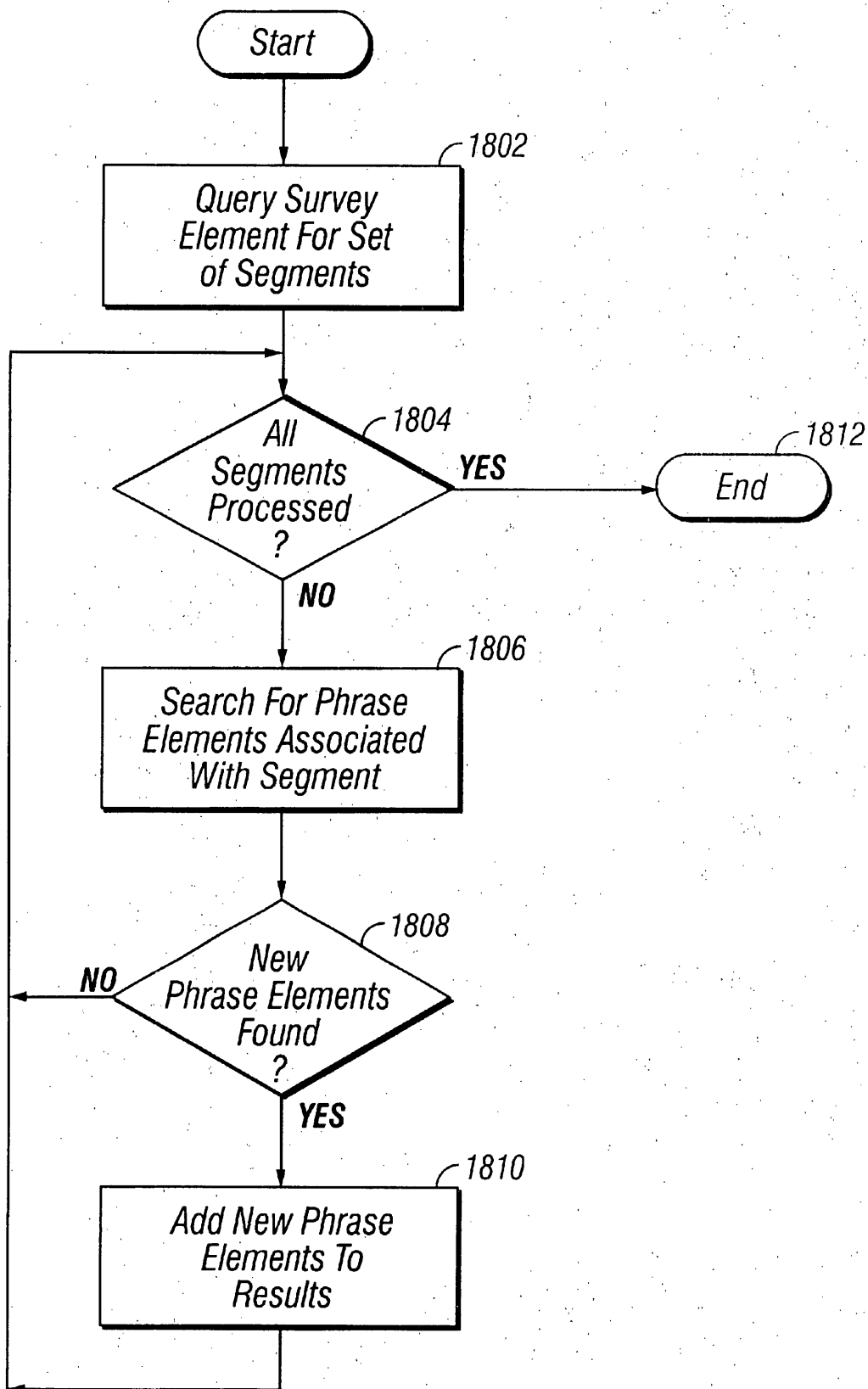


FIGURE 18

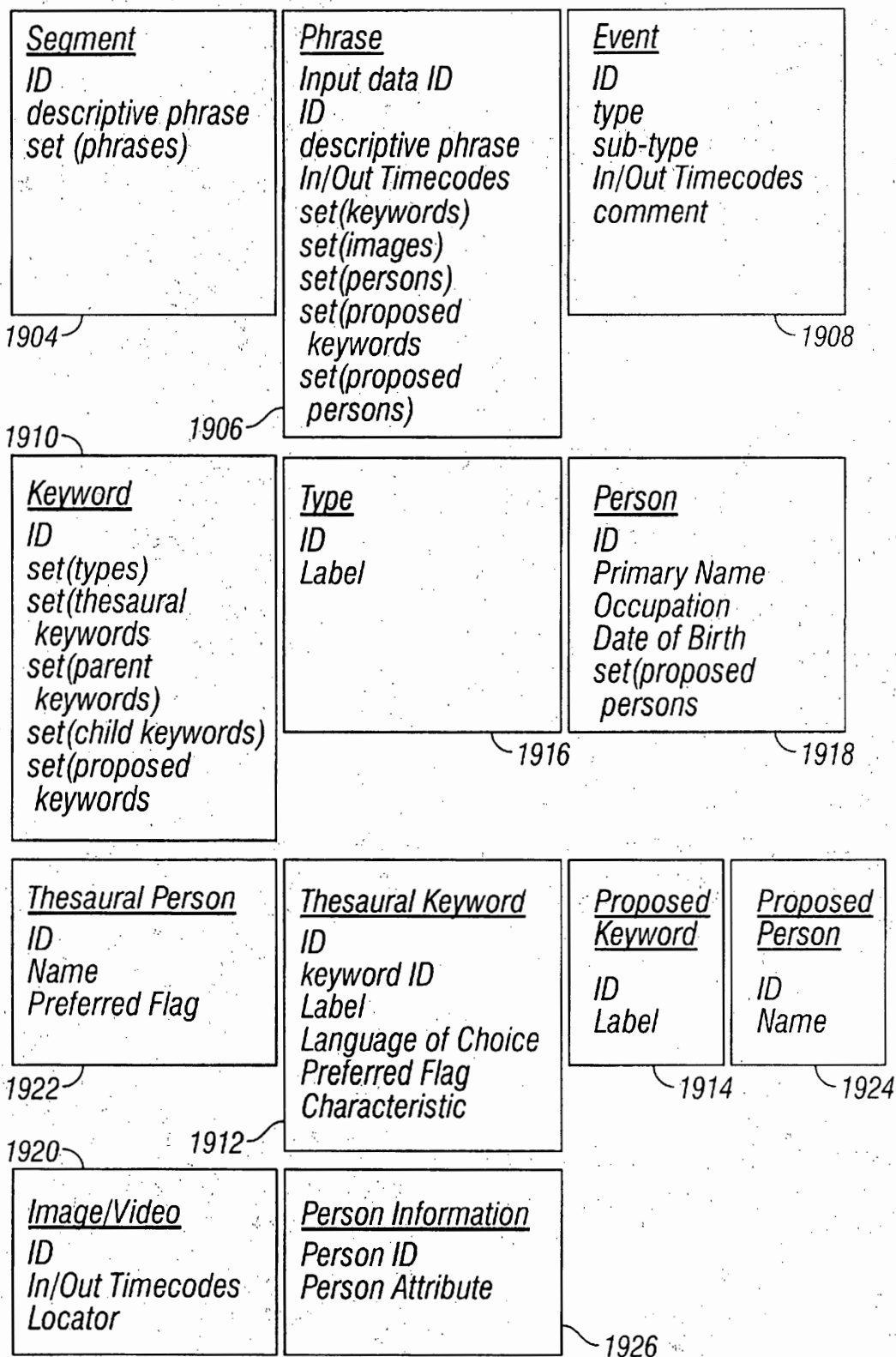


FIGURE 19A

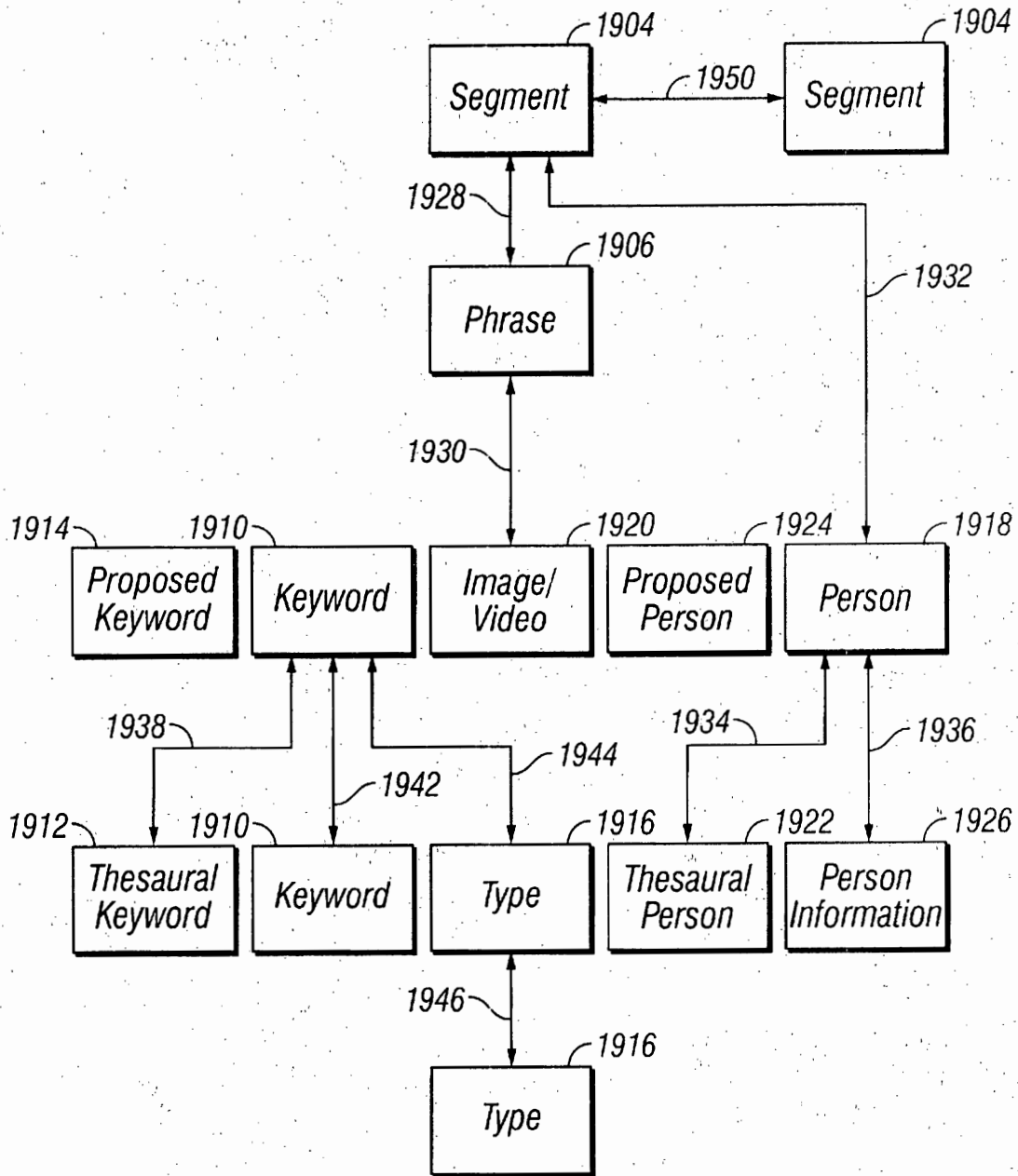


FIGURE 19B

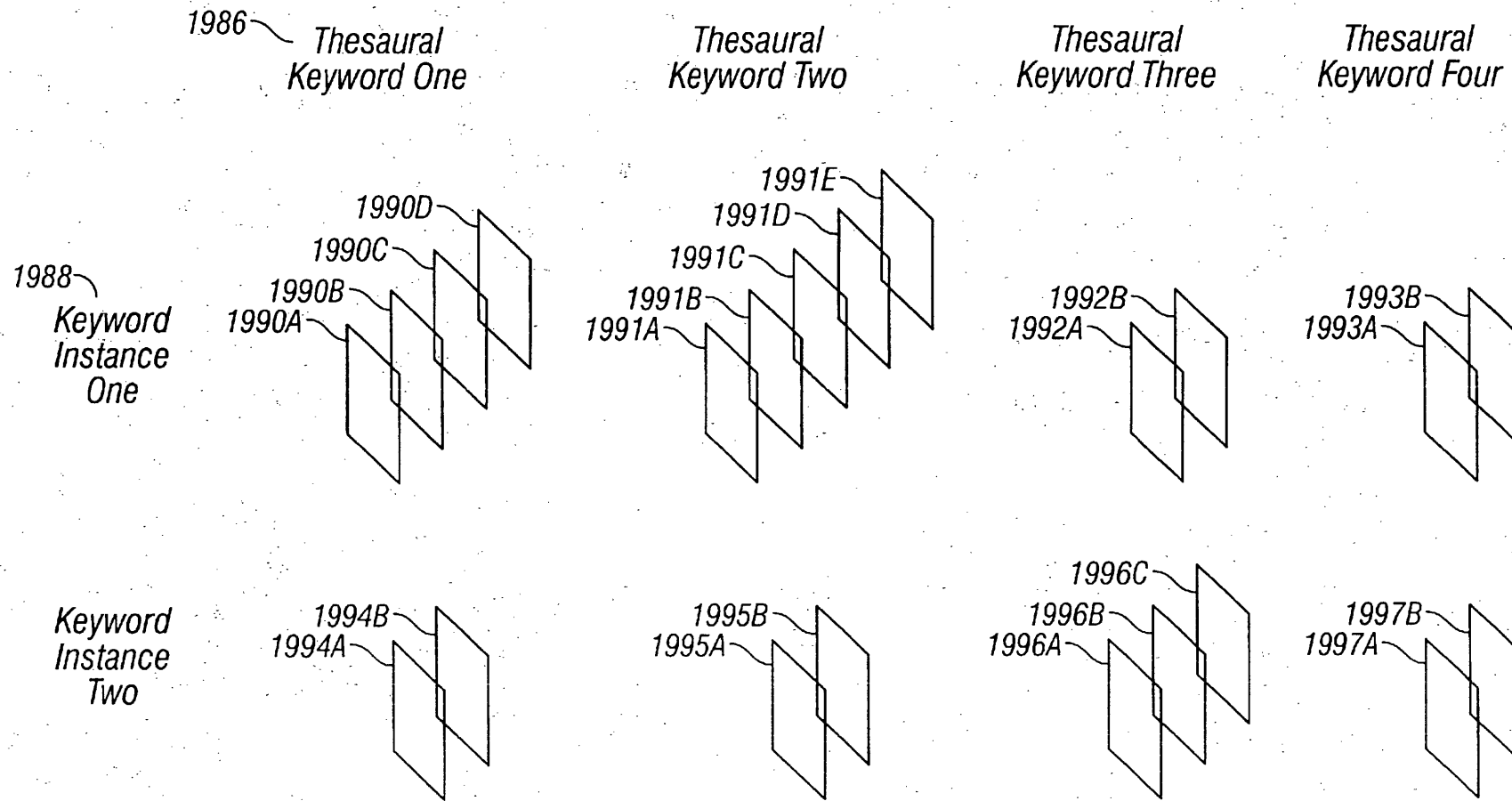


FIGURE 19C

METHOD AND APPARATUS FOR CATALOGUING MULTIMEDIA DATA USING SURVEYING DATA

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to the collection and entering of data associated with a survey or other data collection mechanism using a computer system and the use of the survey data in cataloguing multimedia data.

2. Background Art

Data is sought and collected from different sources and used to, for example, assist in making economic, marketing, etc. decisions. The collected data may be used to supplement historical information with personal experiences and to identify behavioral patterns. For example, the United States government collects census data from households that may be used by governmental entities and community organizations to allocate funds, develop social programs as well as by the business sector to locate factories, shopping centers, etc. Surveys may also be conducted by businesses to determine consumers' attitudes and behavior to assist in the research, development and marketing of products.

In a survey, data collection is typically conducted by posing a set of questions to a set of participants in person, over the phone or in writing, for example. The answers are typically recorded in written form and processed or analyzed in some manner. Existing techniques for analyzing data lack the ability to generate a cohesive data, or knowledge, base of responses across surveys which would facilitate data analysis. Further, existing systems do not provide the ability to relate a survey data base to a multimedia system.

Increasingly, computer systems are being used to present multimedia material. Such material is usually in the form of text, graphics, video, animation, and sound. Two or more of these data types are usually combined to form the multimedia data presented by the computer system. A computer system that is used to present multimedia material is called a multimedia system.

A cataloguing mechanism is useful to catalogue multimedia data in a multimedia system such that the multimedia data may be identified and retrieved by searching the catalogue. For example, it is beneficial to be able to associate descriptive information of a catalogue to segments of multimedia data. The descriptive information may be queried and used to identify relevant segments of multimedia data.

A problem exists in capturing descriptive information that may be used to catalogue multimedia data. One mechanism that has been used to collect information is a survey. It would be beneficial to be able to incorporate the results of a survey into a catalogue that may be used to search and retrieve multimedia data.

SUMMARY OF THE INVENTION

A method and apparatus is described wherein survey data collected from different survey versions may be retained in a cohesive data, or knowledge, base that may be used to catalogue multimedia data. A survey schema is defined that comprises survey elements that may be used to define surveys and capture survey data. In one or more embodiments of the invention, survey data comprising answers to survey questions is stored in one or more elements of the survey schema. Answer elements of the survey schema may be associated with one or more elements of a catalogue of

multimedia data. The linked survey data may be used alone or in combination with the cataloguing system to retrieve multimedia data.

In addition to retaining survey answers, a survey schema comprises survey elements that may be used to build different forms or versions of a survey (a survey instance). Examples of elements of a survey schema used in embodiments of the invention include: section, question group, question, answer, data object, insert, choice group, choice item, for example. A section may be used to group question groups, inserts and sections. An insert may be used to capture repeatable data. A question group may be used to group questions. An answer is associated with each question and may also be associated with an insert. Any combination of questions may be used with any combination of data types for answers to the questions.

According to one or more embodiments of the invention, an answer value may be stored as an attribute of an answer element or as attribute (or attributes) of another element associated with an answer element (e.g., a data object or answer text element). Examples of answer and data object types include text, boolean, date, location, movement, person and keyword. New answer and data object types and data objects may be dynamically added to the survey schema. For example, currency and health types may be added to capture currency and health answers.

In one or more embodiments of the invention, survey data may be associated with elements of a multimedia data catalogue. In one or more embodiments of the invention, survey data comprising a survey, survey answers or both may be queried and the results of the query used to identify multimedia data. A survey schema comprises elements that may be used to build a survey (or surveys) and store answers to survey questions. Elements of the survey may be linked to elements of a multimedia catalogue that are associated with the multimedia data. Survey data may be queried to identify a catalogue element and the multimedia data associated with the catalogue element.

In one or more embodiments of the invention, a phrase element of the catalogue is associated with a multimedia data item and with other catalogue elements such as keywords and persons. In one or more embodiments of the invention, an answer and/or question stored in a survey schema may comprise, or otherwise be associated with, catalogue elements such as a keyword (or keywords) and/or a person (or persons). By identifying a catalogue element (or catalogue elements) in a query operation on an answer or question in a survey schema, it is possible to identify phrase elements. Thus, in one or more embodiments of the invention, an association is formed between survey data and multimedia data via one or more catalogue elements.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1A illustrates a schema comprising survey elements according to an embodiment of the invention.

FIG. 1B provides an example of reusable survey elements according to an embodiment of the invention.

FIG. 1C provides an example of a structure of a survey instance according to an embodiment of the invention.

FIGS. 2A to 2C illustrate elements of the survey schema of FIG. 1A and attributes associated with survey elements according to one or more embodiments of the invention.

FIG. 3 illustrates an example of a window in a graphical user interface used to modify instances of section that comprise a survey instance according to an embodiment of the invention.

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FIGS. 4A-4B illustrate add section and question panels according to an embodiment of the invention.

FIG. 5 provides an example of a display that is used to edit an instance of question according to an embodiment of the invention.

FIG. 6 illustrates a graphical user interface used to edit an instance of choice group according to one or more embodiments of the invention.

FIGS. 7, 8 and 9 provide examples of a graphical user interface for entering object information such as person, alias and location objects according to an embodiment of the invention.

FIG. 10 illustrates a survey definition and generation process flow according to one or more embodiments of the invention.

FIG. 11 provides an example of a graphical user interface illustrating a portion of a survey instance that may be used to capture data according to an embodiment of the invention.

FIG. 12 is a block diagram of one embodiment of a computer system capable of providing a suitable execution environment for an embodiment of the invention.

FIGS. 13-15 provide an overview of associations between survey and multimedia data according to one or more embodiments of the invention.

FIGS. 16-18 illustrate process flows for identification of catalogue elements, such as phrase, related to survey elements.

FIG. 19A provides an example of catalogue and attribute elements and their attributes according to an embodiment of the invention.

FIG. 19B illustrates relationships formed between the elements identified in FIG. 19A according to an embodiment of the invention.

FIG. 19C provides an illustration of instances of keyword 1910 and a plurality of associated label attributes according to an embodiment of the invention.

DETAILED DESCRIPTION OF THE INVENTION

A method and apparatus for cataloguing multimedia data using surveying data is described. In the following description, numerous specific details are set forth in order to provide a more thorough description of the present invention. It will be apparent, however, to one skilled in the art, that the present invention may be practiced without these specific details. In other instances, well-known features have not been described in detail so as not to obscure the invention.

In one or more embodiments of the invention, survey data comprising a survey, survey answers or both may be queried and the results of the query used to identify multimedia data. A survey schema comprises elements that may be used to build a survey (or surveys) and store answers to survey questions. Elements of the survey may be linked to elements of a multimedia catalogue that are associated with the multimedia data. Survey data may be queried to identify a catalogue element and the multimedia data associated with the catalogue element.

In one or more embodiments of the invention, a phrase element of the catalogue is associated with a multimedia data item and with other catalogue elements such as keywords and persons. In one or more embodiments of the invention, an answer and/or question stored in a survey schema may comprise, or otherwise be associated with,

4

catalogue elements such as a keyword(s), phrase(s), segment(s), type(s) and/or a person(s).

By identifying a catalogue element (or catalogue elements) in a query operation on survey data (e.g., an answer or question), it is possible to identify phrase elements that are associated with the catalogue element. In one or more embodiments of the invention, the multimedia data is associated with the survey answer or question via the phrase element and its associated keywords and persons. That is, by identifying a keyword (or person) catalogue element that is associated with a phrase element and an answer (or question) survey element, it is possible to associate multimedia data to survey data and vice versa. Thus, in one or more embodiments of the invention, an association is formed between survey data and multimedia data via one or more catalogue elements.

Survey data may be linked using catalogue elements in addition to, or in replacement of, phrase, keyword or person catalogue elements. In one embodiment of the invention, a survey element may be associated with a segment element of the catalogue that is comprised of phrase elements each of which is associated with multimedia data.

For example, a testimony segment comprises multimedia data associated with a videotaped testimony, or interview, in which survey questions are presented and answered by a survey participant. Survey elements may include a testimony identifier that may be used to identify the testimony segment. The phrase elements associated with a testimony segment as well as the multimedia data associated with the phrase elements may be determined from the testimony segment.

FIGS. 13-15 provide an overview of an association between survey and multimedia data according to one or more embodiments of the invention. Survey data 1302 comprises elements that are associated with a catalogue 1304. Catalogue 1304 comprises that are related to multimedia data 1306.

In one embodiment of the invention, a cataloguing graphical user interface is used to create instances of elements of catalogue 1304 wherein multimedia data is viewed and information descriptive of the multimedia data is stored in elements of the catalogue 1304. In another embodiment of the invention, a surveying system is used to enter survey data (e.g., survey responses) which may be used to populate attributes of elements of catalogue 1304.

In one embodiment of the invention, survey data 1302 comprises elements, such as question 1402 and answer 1404 of FIG. 14, having some number of attributes. Catalogue 1304 comprises keyword 1406 and segment 1408 elements. As is described in more detail below, segment 1408 and keyword 1406 are related to multimedia data 1306 such that an identification of either an instance of keyword 1406, an instance of segment 1408 or both may be used to identify multimedia data 1306.

In an embodiment of the invention, instances of keyword 1406 may be related to instances of question 1402 and answer 1404. For example, it is possible to define one or more instances of keyword 1406 as selectable as an answer to a survey question. An instance of answer 1404 may comprise an attribute (or attributes) that identifies one or more instances of keyword 1406.

Elements of survey data 1302 may comprise one or more attributes that identify instances of segment 1408. For example, in an embodiment of the invention, answer 1404 comprises a "testimonyid" attribute that may be used to identify an instance of segment 1408. That is, an attribute of

answer 1404 may be used to store a value that identifies an instance of segment 1408.

Referring to FIG. 15, keyword 1406 and segment 1408 are associated with phrase 1502 in one or more embodiments of the invention. Phrase 1502 is associated with multimedia data 1306, or a portion thereof. It is possible using an association between phrase 1502 and either keyword 1406 or segment 1408 (or both) to identify an associated portion of multimedia data 1306. As is discussed in more detail below, phrase 1502 contains at least one attribute that may be used to identify multimedia data 1306, or a portion thereof. Elements of survey data 1302 and catalogue 1304 that are in some manner associated with phrase 1502 may be queried to identify instances of phrase 1502 and the multimedia data 1306 related to phrase 1502.

For example, by identifying an instance of question 1402 or answer 1404 that is associated with one or more instances of keyword 1406 or segment 1408, it is possible to identify instances of phrase 1502 and the multimedia data 1306 that is associated with the instances of phrase 1502. In one or more embodiments of the invention, question 1402 and answer 1404 may be associated with a type hierarchy that may be used to classify instances of keyword 1406. It is possible to identify instances of phrase 1502 using type 1504 and the association between type 1504 and keyword 1406. FIGS. 16-18 illustrate process flows for identification of catalogue elements, such as phrase 1502, related to survey elements.

FIG. 16 illustrates a process flow for identification of instances of phrase 1502 using instances of keyword 1406. Keyword 1406 may be associated with question 1402 and answer 1404 of survey data 1302, for example. At step 1602, a set of keywords 1406 is identified from elements of survey data 1302.

For example, a question 1302 may be queried to identify keywords 1406 that are associated with question 1302. The results of the query may be used in conjunction with the process of FIG. 16 to identify multimedia data 1306 that may be displayed when question 1302 is presented in a survey to a survey participant, for example. To further illustrate, a query of instances of answer 1404 may yield a set of answers 1404 wherein an answer includes one or more instances of keyword 1406. The results of the query may be used in conjunction with the process of FIG. 16 to identify multimedia data that may be displayed as part of an answer to a survey question, for example.

At step 1604, a determination is made whether all of the keywords identified in step 1602 have been processed. If so, processing ends at step 1612. If not, processing continues at step 1606 to search catalogue 1304 for instances of phrase 1502 associated with the next keyword in the set created in step 1602.

At step 1608, a determination is made whether new instances of phrase 1608 were found in step 1606 (i.e., instances of phrase 1502 that were not found in a previous execution of step 1606). If not, processing continues at step 1604 to process any remaining keywords. If there are new instances of phrase 1502, processing continues at step 1610 to add the new instances to a result comprising instances of phrase 1502, and processing continues at step 1604 to process any remaining keywords. The result comprises instances of phrase 1502 related to the survey element (or elements) related to instances of keyword 1406 identified in step 1602. The multimedia data 1306 related to the instances of phrase 1502 in the result may be identified using the instances of phrase 1502.

Type 1504 may be associated with elements of survey data 1302 and keyword 1406 and thus may be used to identify a set of related multimedia data 1306. FIG. 17 illustrates a process flow for retrieval of instances of phrase 1502 using instances of type 1504. Type 1504 may be associated with elements of survey data 1302. At step 1702, a set of types is identified that comprises instances of type 1504 that are related to one or more elements of survey data 1302 (e.g., to an instance (or instances) of question 1402 or answer 1404, or both).

At step 1704, a determination is made whether all of the types identified in step 1702 have been processed. If so, processing ends at step 1716. If not, processing continues at step 1706 to search catalogue 1304 for instances of keyword 1406 that are related to the next instance of type 1504 in the set. At step 1708, a determination is made whether all of the keywords identified in step 1706 have been processed. If so, processing continues at step 1704 to process any remaining types. If not, processing continues at step 1710 to search catalogue 1305 for instances of phrase 1502 associated with the next keyword in the set created in step 1706.

At step 1712, a determination is made whether new instances of phrase 1502 were found in step 1710 (i.e., instances of phrase 1502 that were not found in a previous execution of step 1710). If not, processing continues at step 1708 to process any remaining keywords. If there are new instances of keyword 1406, processing continues at step 1714 to add the new instances to a result comprising instances of phrase 1502, and processing continues at step 1708 to process any remaining keywords. The result comprises instances of phrase 1502 related to the survey element (or elements) related to instances of type 1504 identified in step 1702. The multimedia data 1306 related to the instances of phrase 1502 in the result may be identified using the instances of phrase 1502.

Elements of survey data 1302 may be related to an instance (or instances) of segment 1408. Using a relationship between segment 1408 and phrase 1502, it is possible to identify the multimedia data 1306 that is associated with an element of survey data 1302 that is related to segment 1408. FIG. 18 illustrates a process flow for identification of instances of phrase 1502 using instances of segment 1408.

At step 1802, a set of segments is identified that comprises instances of segment 1408 that are related to one or more elements of survey data 1302 (e.g., to an instance (or instances) of answer 1404, a data object, or both).

At step 1804, a determination is made whether all of the segments identified in step 1802 have been processed. If so, processing ends at step 1812. If not, processing continues at step 1806 to search catalogue 1304 for instances of phrase 1502 that are related to the next instance of segment 1408 in the set.

At step 1808, a determination is made whether new instances of phrase 1608 were found in step 1806 (i.e., instances of phrase 1502 that were not found in a previous execution of step 1806). If not, processing continues at step 1804 to process any remaining segments. If there are new instances of segment 1408, processing continues at step 1810 to add the new instances to a result which comprises instances of phrase 1502, and processing continues at step 1804 to process any remaining segments. The result comprises instances of phrase 1502 related to the survey element (or elements) via instances of segment 1408 identified in step 1806. The multimedia data 1306 related to the instances of phrase 1502 in the result may be identified using the instances of phrase 1502.

FIGS. 16-18 are discussed with reference to the question 1402 and answer 1404 elements of survey data 1302. It should be apparent that other elements of survey data 1302 may be used as well. For example, in one or more embodiments of the invention, survey data 1302 comprises data objects that may be used to store an answer to a survey question. Examples of data objects include person, alias, and location. It is possible to search survey data using one or more data objects as well as other elements of survey data 1302. Similarly, other catalogue elements may be related to survey data or used to identify multimedia data.

Survey Data

In one or more embodiments of the invention, survey data comprises a survey schema that comprises survey elements that may be used to define surveys and capture survey data. In one or more embodiments of the invention, survey data comprising answers to survey questions is stored in one or more elements of the survey schema. Answer elements of the survey schema may be associated with one or more elements of a catalogue that may be used as indices into multimedia data. In one or more embodiments of the invention, a catalogue comprises keywords organized in a hierarchy and categorized according to a type hierarchy, phrases and segments, for example.

Survey data may be collected from different survey versions into a cohesive data, or knowledge, base or other storage mechanism. Each survey version may comprise different sets of questions and different types of answers to the questions. In an embodiment of the invention, at least one relational database may be used to store survey schema, survey instances and participant data. However, it should be apparent that other storage mechanisms (e.g., file system) may be used. Data may be collected and retained in a cohesive store for each participant regardless of the survey form or instance used.

A survey schema comprises survey elements that may be used to build different forms or versions of a survey (a survey instance). Examples of elements of a survey schema used in embodiments of the invention include: section, question group, question, answer, data object, insert, choice group, choice item, for example. A survey instance may be defined using elements of a survey schema. For example, a survey instance may comprise some number of sections each of which may comprise some number of sections (or subsections), inserts and question groups. A question group may comprise questions. An answer is associated with each question and may also be associated with an insert. Any combination of questions may be used with any combination of data types for answers to the questions. An existing survey instance may be dynamically modified by adding, deleting or modifying survey elements.

In one or more embodiments of the invention, the schema includes a question element that is used to define survey questions. Questions may be grouped using a question group element. Questions and answer types may be dynamically added to the survey schema and added to a survey instance created using the survey schema. An association is created between a question and an answer via the question and answer elements.

According to one or more embodiments of the invention, a survey schema includes an answer element that identifies a data type that may be a simple or complex data type. A simple data type typically involves a single value while a complex data type may involve multiple values. In one or more embodiments of the invention, simple data is stored in

an attribute of an instance of answer or another element associated with the answer instance (e.g., answer text). Complex data is stored in more than one attribute such as in attributes of a data object that is related (directly or indirectly) to an answer element. Thus, an answer value may be stored as an attribute of an answer element or as attribute (or attributes) of another element associated with an answer element (e.g., a data object or answer text element). Examples of answer and data object types include text, boolean, date, location, movement, person and keyword. New answer and data object types and data objects may be dynamically added to the survey schema.

Survey answers that are retained in the survey data base (e.g., in answer, answer text and data object elements) may comprise links to elements of a catalogue that is associated with multimedia data. For example, an answer to a survey question may comprise one or more keywords that are components of a catalogue into the multimedia data.

A special type of survey element referred to as an insert may be repeated none or more times in a survey. An insert may be used, for example, to accommodate repeatable survey information. For example, a survey may include questions requesting a person's educational background (e.g., undergraduate and graduate collegial background). An insert may be used to capture each collegial experience, for example.

Question group elements are reusable in a survey such that more than one instance of a question in a question group may share the same identifier. Thus, it is possible to correlate answers to question instances using the same identifier.

Survey Schema

According to one or more embodiments of the invention, a schema is defined that identifies a generic survey structure and includes survey elements that may be used to create survey instances and capture data collected for each survey instance. FIG. 1A illustrates a schema comprising survey elements according to an embodiment of the invention.

In one or more embodiments of the invention, a survey instance (or survey form) 150, created using a schema such as survey schema 160, comprises one or more instances of section 102. Section 102 may include a number of instances of section 102 (or subsections), insert 104 or question group 106. Insert 104 represents an element that may be repeated in survey instance 150. Insert 104 may be used to dynamically add components to a survey instance 150 to capture repeatable data which may occur when there can be multiple answers to a question or questions, for example. A section may contain questions requesting information regarding the automobiles that a participant's has purchased. An insert may be used to group answers associated with each of the automobiles.

A subsection is an instance of section 102 that is contained within another instance of section 102. In one or more embodiments of the invention, there may be a hierarchy of instances of section 102 defined in survey schema 160 and/or used in a survey instance 150.

An instance of section 102 is related to another instance of section 102 via relationship 126 such that an instance of section 102 may contain (or be contained in) multiple instances of section 102. Insert 104 is related to section 102 via relationship 130 such that multiple instances of insert 104 may be associated with section 102. Section 102 may contain none or more instances of insert 104. Section 102 may be associated with, and contain, none or more instances of question group 106 as is illustrated by relationship 132.

Question group 106 may be used to group a number of instances of question 108. Question group 106 may contain more than one question 108. Question 108 may be included in more than one question group 106.

In one or more embodiments of the invention, a set of selection items (each identifying a valid answer selection) may be associated with a question. A selection is identified by a choice item 114. Choice group 112 is used to group a number of instances of choice item 114 to an instance of question 108. Where a choice group 112 is associated with question 108, a value of answer 110 may be identified by selecting one of a number of choices identified by instances of choice item 114 comprising choice group 112.

In one or more embodiments of the invention, choice item 114 may be one selection item, or value. For example, an instance of choice item 114 may specify an instance of keyword 110 (i.e., an attribute value associated with keyword 110). Alternatively, choice item 114 may identify a class that comprises a plurality of selection items. For example, choice item 114 may identify an instance of type 118, where type 118 represents a class of selection items (e.g., a class of keywords). A class of selection items comprises selection items (e.g., instances of keyword 116) that are of type 118. Thus, choice group 112 may comprise instances of choice item 114 which may be a combination of none or more individual selection items and none or more classes of selection items.

An answer may be a simple or complex answer. A simple data type typically involves a single value while a complex data type may involve multiple values. In one or more embodiments of the invention, simple data is stored in an attribute of an instance of answer or another element associated with the answer instance (e.g., answertext). Complex data is stored in more than one attribute such as in attributes of a data object that is related (directly or indirectly) to an answer element.

In one or more embodiments of the invention, an answer to an instance of question 108 may be stored in answer 110, answerText 120 and/or data object 122. A single-value answer may be stored in an attribute of answer 110 (e.g., a value stored in attribute 266, "answertext" of FIGS. 2A-2C). None or more instances of answertext 120 may be used to store additional answer text of a question 108. In an embodiment of the invention, a survey element referred to as data object 122 may be used to store a multi-value answer. In an embodiment of the invention, multiple instances of data object 122 may be used to store a multi-value answer to question 108. An attribute of one data object 122 may be stored as attributes of data object 122. Thus, an instance of data object 122 may be associated with another instance of data object 122 and answer 110, for example.

In an embodiment of the invention, data object 122 includes, but is not limited to, person, alias, date, movements and location objects each of which comprise a set of attributes that may be used to store values of a multi-value answer. A person data object may have first name, middle name, last name, date of birth, gender, type, title, etc. attributes, for example. Embodiments of the invention may include additional or different data objects 122 or have additional or different attributes.

Survey schema 160 is used to create none or more survey instances 150. Survey instance 150 may be in a print, electronic or other form, for example. In one or more embodiments of the invention, survey instance 150 may be displayed in a graphical user interface (GUI) which may be used to capture survey data. The GUI may be used by a

survey participant to enter answers, or by another party who enters a participant's answers recorded on a hardcopy of a survey instance 150, for example.

In one or more embodiments of the invention, a survey instance 150 that is displayed in a GUI or otherwise may comprise some number (i.e., none or more) of instances of elements of survey schema 160. FIG. 1C provides an example of structure of a survey instance according to an embodiment of the invention. Survey instance 150 comprises some number of section 102, question group 106, question 108, choice group 112, choice item 114, etc. Question 108 identifies an answer 110 that is to be used in capturing an answer (or answers) to the question. Answer 110 may identify a data object, or other schema element, that may be used in storing answer values. Instances of answer 110, answer text 120 and object 122 may be added to a survey instance 150 to store answers to a question 108. Insert 104 may be associated with instances of section 102 and instances of insert 104 may be dynamically added during data capture to capture repeatable data, and answer 110 may be associated with an insert 104.

Survey schema 160 may be used to create any number of survey instance 150 each of which may vary in their structure including but not limited to section 102, question group 106, question 108, answer 110 and/or the types of answers that are expected for each question. Answers associated with each of survey instance 150 may be captured into a cohesive data store (e.g., a relational database or databases).

Survey Schema Element Attributes

In one or more embodiments of the invention, attributes of elements of survey schema 160 comprise attributes that may be used to store information concerning components of a survey instance 150 and data collected for a survey instance 150 (e.g., participant data). FIGS. 2A to 2C illustrate elements of survey schema 160 of FIG. 1A and attributes associated with survey elements according to one or more embodiments of the invention.

Section 102 includes a section identifier attribute 202 ("SectionID") that uniquely identifies each instance of section 102. A parent identifier attribute 204 ("ParentID") identifies a subsection's parent instance of section 102. Attributes 206 and 208 indicate whether an instance of section 102 may have inserts (e.g., instances of insert 104) and the type of insert(s), respectively. Section name attribute 280 ("SectionName") comprises a name or title of an instance of section 102.

In one or more embodiments of the invention, element 130 of survey schema 160 is used to relate section 102 and question group 106 in a many-to-many relationship. That is, section 102 may include none or more instances of question group 106, and none or more instances of section 102 may contain the same instance of question group 106. Instances of element 130 may be identified using attribute 210 ("SectionQ_id"). Attributes 212 and 214 relate an instance of section 102 using its identifier (section identifier 150) and an instance of question group 106 using its identifier (question group identifier 216, "QGroup_id"), respectively. Question 108 includes a question identifier 220 ("QuestionID") to identify each instance. Attribute 218 associates an instance of question 108 with an instance of question group 106. Answer type attribute 222 identifies an answer type for question 108. Where the type of answer is a complex data object, attribute 228 identifies the type of data object (e.g., person 128, location 124 and alias 126).

Attribute 226 contains the text of the question. Attribute 230 identifies whether an answer 110 associated with an instance of question 108 is repeatable.

Choice group 112 includes a choice group identifier 240 ("ChoiceGroupID") that identifies an instance. Choice group identifier 240 is used in choice item 114 (attribute 242) to associate an instance of choice group 112 with an instance of choice item 114. Attributes 244 and 246 of choice item 114 to identify one selection item or a class of selection items, respectively.

Insert 104 includes an identifier attribute 248 ("Insert_id") that identifies an instance. Insert 104 is used to identify a repeatable data in a survey instance 150. Attribute 250 ("SectionID") associates an instance of insert 104 to an instance of section 102. Attribute 278 ("InsertType") identifies a type of insert.

An instance of answer 110 may be identified using attribute 252 ("AnswerID"). Attribute 254 ("QuestionID") associates an instance of answer 110 and an instance of question 108. An instance of answer 110 may be associated with an instance of insert 104 via attribute 256 ("InsertID"). A value that is an answer to a question may be stored in attribute 266 ("answertext"). Additional answer values may be stored in attribute 292 ("answertext") of element 120 which may be associated with answer 110 using attribute 290. Alternatively, a data object may be used to store a multi-value answer. Attributes 262 and 264 may be used to associate an answer 110 with a data object 122. Attribute 260 ("AnswerType") specifies the type of answer. Examples of answer types include boolean, plain text, object (e.g., data object) and single select. Person 128, alias 126 and location 124 are examples of data object 122. Person 128 includes attributes associated with a person (e.g., name, gender, date of birth, etc.) Attribute 268 ("PersonID") is used to identify an instance of person 128. A new answer type may be added by specifying a new value for attribute 260 associated with the new answer, or data, type.

Another example of data object 122, alias 126 may be used to store another identity associated with, for example, a person. Attribute 272 ("AliasID") is used to identify an instance of alias 126. Attribute 274 relates an instance of person 128 and alias 126. Location 124 includes attributes for storing location information (e.g., city, state, country, street address, etc.). Attribute 276 is used to identify an instance of location 124.

In one embodiment of the invention, for example, multiple instances of question 108 may be created with the same identifier. None or more instances of answer 110 relate to one instance of question 108. Alternatively, more than one instance of question 108 having the same identifier may be associated with none or more instances of answer 110. That is, a survey element such as question 108 may be reused such that multiple instances of question 108 are given the same identifier. Thus, the same identifier may be used to identify one or more instances of the element thus facilitating a query for information associated with the reusable element.

For example, all instances of answer 110 related to an instance (or instances) of question 108 may be retrieved by querying for one value of attribute 220 (i.e., "QuestionID"). Question group 106 further includes attribute 286 which indicates whether question group 106 is reusable. In a reusable question group 106, instances of the same question 108 are given the same identifier across instances of question group 106.

FIG. 1B provides an example of a question 108 in a reusable question group 106 according to an embodiment of

the invention. Section instances 180A-180D are generated using section 102 of survey schema 160. In each of section instances 180A-180D, Attribute 202 is populated with a value that may be used to identify the instance. For example, section instances 180A-180D have identifiers of "S₁," "S₂," "S₃," and "S₄," respectively. Section instances 180A-180D may be included in the same or a different survey instance 150.

In this example, each of section instances 180A-180D is associated with an instance of question group (i.e., question groups 182A-182D, respectively). Attribute 216 of question group 106 is assigned an identifier value in each of question groups 182A-182D. In the example of FIG. 1B, identifier values for question groups 182A-182D are "QC₁," "QC₂," "QC₃" and "QC₄," respectively. A different value is used to uniquely identify each instance.

Question groups 182A-182D are reusable such that questions 184A-184D within each have the same identifier. As a member of a reusable component of a survey, questions 184A-184D have the same identifier (i.e., "Q1").

Answers 186A-186D are instances of answer 110 that represent answers to questions 184A-184D, respectively. An identifier is assigned to each of answers 186A-186D (i.e., "A₁," "A₂," "A₃" and "A₄").

It is possible to retrieve answers associated with questions 184A-184D using the same identifier. That is, it is possible to find all answers to a question whose identifier is equal to "Q₁." If each of questions 184A-184D had different identifiers, it would be necessary to identify the value of each identifier prior to retrieving the answers associated with each question.

In one or more embodiments, answer 110 may be repeatable. Attribute 230 of question 108 identifies an answer as being repeatable.

Process Overview

In one or more embodiments of the invention, schema 160 is used to create multiple survey instances 150. FIG. 10 illustrates a survey definition and generation process flow according to one or more embodiments of the invention.

At block 1002, survey schema 160 is defined. For example, elements of survey schema 160 may be added, deleted or modified. Instances of section 102, question group 106, question 108, answer 110, data object 122, and choice group 112 may be added, deleted or modified, for example. Relationships between elements of survey schema 160 may be added, deleted or modified. For example, an instance of question 108 may be added to or removed from a question group 106. Similarly, a question group 106 may be added to or removed from a section 102. An insert 104 may be added to or removed from a section 102. A choice item 114 may be added to or removed from a choice group 112, and a choice group 112 may be added to or removed from a question 108.

In one or more embodiments of the invention, a new answer type may be added to schema 160. Each answer type has an associated value (e.g., a numeric value). Question 108 and answer 110 include an attribute (e.g., "Answertype," attributes 222 and 260, respectively) that identify the answer type associated with each. In an embodiment of the invention, an answer type associated with question 108 or answer 110 may be changed by modifying an attribute of question 108 or answer 110. Similarly, a data object 122 (e.g., person 128, alias 126 and location 124) that is associated with question 108 or answer 110 may be changed by modifying attribute values (e.g., attributes 228 and 262, respectively).

At block 1004, a survey instance 150 may be defined using a survey schema 160 defined in block 1004. A survey instance 150 may comprise none or more instances of section 102, question group 106, question 108, choice group 112, insert 104, answer 110, choice item 114, etc. It is possible, in one or more embodiments of the invention, to define survey schema 160 and survey instance 150 simultaneously. For example, it is possible to define an element of schema 160 (e.g., using step 1102) for use in a survey instance 150 at step 1004. A survey designer may make use of the elements of survey schema 160 to define a survey instance 150 as well as define additional elements of survey schema 160.

In one or more embodiments of the invention, a change to an element of survey schema 160 is reflected in a survey instance 150 that includes the element. For example, if an instance of question 108 is modified in survey schema 160 (e.g., the text of an instance of question 108 or the answer is changed), the modification is reflected in a survey instance 150 that includes that instance of question 108. The propagation of a modification in survey schema 160 to a survey instance 150 may be avoided, for example, making modifications to an element (new or existing) that is not included in the survey instance 150. A new element may be created with or without the use of an existing element (or elements) as a template.

At block 1006, data may be captured in elements of survey schema 160 for a survey instance 150. For example, data is captured using instances of answer 110, answer text 120, insert 104 and data object 122. In one or more embodiments of the invention, answer text may be stored in attribute 266 of answer 110 and/or attribute 292 of answer text 120. An association between answer 110 and answer text 120 may be formed by storing an identifier of answer 110 in attribute 290 of answer 120.

In one or more embodiments of the invention, a data object 122 may be used to store all or a portion of an answer. If, for example, the answer is of type person, a person 128 instance may be created and the attributes are populated with the person's information. In one or more embodiments of the invention, a relationship is created between an answer 110 and the person 128 instance by storing the identifier of the person 128 instance in attribute 264 of answer 110.

In one or more embodiments of the invention, one data object 122 may be related to another data object 122 as part of an answer. For example, alias 126 may be related to person 128 and store alias information (e.g., a nickname or other name) associated with a person.

Insert 104 may be used to group answers to questions. For example, a participant may provide more than one set of answers to questions in an instance of section 102. Each set of answers may be associated with an instance of insert 104.

Survey Example

In one or more embodiments of the invention, a graphical user interface is used to define schema 160, define survey instance 150 and capture data from a survey instance 150 (e.g., to perform steps 1002, 1004 and 1006 of FIG. 10). Survey Data Capture GUI

FIG. 11 provides an example of a GUI illustrating a portion of a survey instance 150 that may be used to capture data according to an embodiment of the invention. It should be apparent that embodiments of the invention are not limited to the survey example of FIG. 11.

In the example of FIG. 11, window 1102 depicts a portion of a survey instance 150 used to capture holocaust survivor

information. Each survivor (i.e., survey participant) is asked for biographical information including general information in addition to prewar, wartime and post-wartime experiences. Data may be entered using window 1102 from a printed version of a survey instance 150, or directly by a participant, for example. Area 1104 provides a list of sections 102 of the survey instance 150. According to one or more embodiments of the invention, a user enters survey data by selecting, or opening, sections (e.g., sections 1106 and 1108) in area 1104.

Section 1108 is opened which indicates that it has been selected while sections 1106 are closed or collapsed in this example. In one or more embodiments of the invention, display 1110 identifies instances of question group 106 of an open instance of section 102 (e.g., section 1108) is displayed. An instance of question group 106 in display 1110 may be selected such as question group selection 1112 which is shaded to indicate that it has been selected. Instances of question 108 that are associated with question group selection 1112 are displayed in area 1114 of window 1102.

Area 1114 comprises columns 1116, 1118 and 1120. In this embodiment of the invention, answer type may also be displayed as a further prompt to the user. For example, entry 1130A indicates that the answer that is expected is a boolean answer (e.g., "yes" or "no"). Entry 1130B indicates that a plain text answer is expected for the question. Entries 1130C and 1130D indicate that instances of data object 122 (i.e., location 124 and person 128) are the expected type for these questions.

Answer text is displayed in columns 1118 and 1120. Instances of choice item 114 may be displayed in area 1122. Thus, for example, when an instance of question 108 displayed in column 1116 is selected, instances of choice item 114 that are associated with the selected instance of question 108 are displayed in area 1122.

Area 1124 may be used to display possible answer selections associated with a question that is displayed in area 1114. For example, entry 1130D expects an instance of person 128 as an answer. Column 1126 may be used to display existing instances of person 128 that may be selected as an answer. Column 1128 of area 1124 may also be used to enter a proposed answer to a question. The proposed answer is retained, subsequently reviewed, and either accepted, or rejected. If accepted, the proposed answer becomes an answer to the question and may become a selectable answer to another question. If rejected, a proposed answer is removed, and another answer may be provided. Survey Definition GUI

FIG. 3 illustrates an example of a window in a GUI used to modify instances of section 102 that comprise a survey instance 150 according to an embodiment of the invention. In display 302, a window is shown which is comprised of instances of section 102, question group 106 and question 108.

Panel 304 displays instances of section 102 (sections 306 and 308) within an instance of form 150. Sections 306 are collapsed such that instances of question group 106 are not displayed. Section 308 is expanded to display instances of question group 106 within section 308 (e.g., question groups 310 and 312). Question group 312 is selected in panel 304 such that instances of question 108 are displayed in panel 316 and the name (i.e., section name attribute 280) is displayed in panel 314.

Panel 316 displays attribute values associated with instances of question 108. Column 320 of panel 316 identifies the question text (i.e., attribute 226) of five instances associated with question 108. Column 318 of panel 316

identifies answer types (e.g., retained in attribute 222) associated with each question. Columns 322, 326 and 328 display values for attributes 284, 228 and 230 of question 108, respectively. Column 324 displays the name of an instance of choice group 112 that groups choices, or answer selections, for a question.

Using buttons 330, 332, 334 and 336, a survey developer may add a section, delete a section, add a question, delete a question respectively. FIGS. 4A-4B illustrate add section and question panels according to an embodiment of the invention.

Referring to FIG. 4A, panel 402 may be used, in one or more embodiments of the invention, to add a section (i.e., to survey schema 160 and/or survey instance 150). Pull down menu area 404 is used to display instances of section 102 to select a parent section where the new instance of section 102 is a subsection of another instance of section 102. Text field 406 may be used to enter a name (e.g., attribute 280) of the new instance of section 102. Check box 412 may be selected to specify whether an instance of insert 104 is associated with an instance of section 102. Pull down menus 408 may be used to display instances of insert 104 to identify types of inserts that are allowed. The save button 410 is used to save the new instance of section 102 in survey schema 160.

A new instance of question group 106 may be added, in one or more embodiments of the invention, using panel 422 of FIG. 4B. Pull down menu 424 displays instances of section 102 to select a section 102 that includes an instance of question group 106 as a member. Text field 426 may be used to enter a title for an instance of question group 106. Check box 430 identifies the instance of question group 422 as a reusable question group (i.e., set attribute 286 of question group 106). Save button 428 commits the new instance to survey schema 160 as an instance of question group 106.

Instances of question 108 may be added, modified or deleted from survey schema 160 or a survey instance 150. FIG. 5 provides an example of a display (i.e., panel 502) that is used to edit an instance of question 108 according to an embodiment of the invention. Fields 516 and 504 identify the name associated with an instance of question group 106 and the text of the question associated with an instance of question 108, respectively. An answer type may be selected from answer type selections 510. Where the answer type is an object, pull down menu 512 may be used to display instances of object 122 for selection. Pull down menu 514 may be used to display instances of choice group 112 to associate answer choices to an instance of question 108.

FIG. 6 illustrates a user interface used to edit an instance of choice group 112 according to one or more embodiments of the invention. Display 602 includes a listing, in panel 604, of instances of choice group 112. Selecting one of the entries in panel 604 causes information associated with the selected instance of choice group 112 to be displayed in panels 610 and 614. Panel 616 displays instances of type 118 and keyword 116 for selection.

Panel 610 identifies instances of choice item 114. A choice or class of choices may be dragged from panel 616 to panel 614. A choice (e.g., an instance of keyword 116) that is dragged from panel 616 to panel 614 is displayed in panels 614 and 610. A class of choices (e.g., type 118) is displayed in panel 614 and the choices within the class are displayed in panel 610. None or more of the choices within a class of choices may be excluded from the choices by dragging the choice from panel 610 to trash 618.

Entry 608 in panel 610 indicates that the instance of choice item 114 derives from a class of choices. Entry 612 of panel 614 identifies a class of choices (i.e., "concentration camps").

In one or more embodiments of the invention, an answer to a question may comprise a single answer or multiple answers. Answer 110 includes an attribute (e.g., attribute 266, "answertext") that may store a single answer such as a date, a boolean (e.g., "yes" or "no"), currency and text. Alternatively, answer 110 may contain a pointer to an instance of object 122 that comprises one or more attributes that contain the answer. Examples of object 122 include a person object, alias object and location object. FIGS. 7, 8 and 9 provide examples of a GUI for entering object information such as person, alias and location objects according to an embodiment of the invention.

Referring to FIG. 7, panel 702 may be used, in one or more embodiments of the invention, to enter information about a person. Pull down menu 704 is used to display and identify a relationship between the person surveyed and the person that is a part of the answer. Fields 706 are used to enter information related to the person answer. Text field 708 may be used to enter a note about the person. Pull down menus 710 may be used to identify an alias associated with the person answer (e.g., a name to which the person is also known).

FIG. 8 provides an example of a panel 802 that may be used to enter alias object information. Pull down menu 804 may be used to display and identify another survey element (e.g., person object) for which the alias object is an alias. Fields 806 identify the alias name, title, etc. Pull down menu 808 is used to display and select an alias type. Text field 810 may be used to input additional notes.

In an embodiment of the invention, if an answer to a question is a location, a location object is used. FIG. 9 provides a display of a panel 902 that may be used to specify a location answer according to one or more embodiments of the invention.

Pull down menu 906 is used to display and select a location type. Fields 908 are used to enter information associated with the attributes of a location object. Column 910 is used to receive a text entry. Column 912 may be used to display a selection made from class items associated with a given attribute. Panel 904 may be used to display choices for one of the fields in column 912 that has been selected. A choice is selected, in one or more embodiments of the invention, by dragging it from panel 904 to the selected field (e.g., field 914).

Catalogue

In one or more embodiments of the invention, catalogue 1304 used in one or more embodiments of the invention comprises catalogue elements. As discussed above, one catalogue element, a phrase (e.g., phrase 1502 or phrase 1906 of FIGS. 19A-19C), may be associated with a portion of multimedia data 1306. A phrase has a plurality of attributes some of which are attribute elements. The attribute elements that are attributes of a phrase include keyword, person, image, video (e.g., documentary footage), proposed person, and proposed keyword. The keyword, person, image, proposed person and proposed keyword attribute elements can have attributes that are also attribute elements. For example, attribute elements that are attributes of the keyword attribute element include thesaural keyword, thesaural person, keyword, and type. An index is built on the attributes and attribute elements. The index can be used to navigate through the catalogue (e.g., search for phrases).

FIG. 19A provides an example of catalogue and attribute elements and their attributes according to an embodiment of the invention. Segment 1904 (also referred to herein as segment 1408) is a container element. It can contain other

elements. For example, segment 1904 can contain one or more instances of phrase 1906. In the invention, input data is decomposed into one or more pieces, or fragments. An instance of phrase 1906 is associated with each input data fragment. Phrase 1906 is a catalogue element. Phrase 1906 has one or more attributes and/or attribute elements on which an index is built. The index can be used to navigate through the catalogue.

An attribute of phrase 1906 is keyword 1910 (also referred to herein as keyword 1406). An instance of phrase 1906 can be associated with one or more instances of keyword 1910. Keyword 1910 further defines aspects of an input data fragment. Preferably, an attribute of keyword 1910 identifies content, or substance, for an input data fragment. The content or substance identified by keyword 1910 is preferably expressed as a single word. However, content or substance can be expressed using multiple words.

To illustrate, the input data can be a videotape. The videotape is, for example, that of an interview, or survey, conducted with a survivor of the Holocaust. The interview is broken down into the interviewee's pre-war, war-time, and post-war experiences. The interviewee's pre-war experience can be broken down into topics (e.g., each of which may be instantiated as a section 126). A pre-war topic might be the interviewee's personal life, for example. Each topic can be broken down into sub-topics (each of which may be instantiated as subsections, or instances of section 126). In the example of the interviewee's personal life, a sub-topic might be the interviewee's relationship with family members, experiences at school, etc. Each sub-topic contains an information item. To further illustrate using the current example, an information item might be home, brother, sister, teacher, etc. In this example, the topic of the interviewee's personal life becomes an instance of segment 1904. The interviewee's relationship with family members and experiences at school become instances of phrase 1906. The words home, brother, sister, and teacher become instances of keyword 1910. The words home, brother, sister and teacher provide information regarding the content or substance of an input data fragment.

An instance of keyword 1910 can be associated with one or more instances of thesaural keyword 1912. An instance of thesaural keyword 1912 is an instantiation of an instance of keyword 1910. Thesaural keyword 1912 specifies a value or label for its associated instance of keyword 1910. Thesaural keyword 1912 can be one or more words. Thesaural keyword 1912 can be used, for example, to specify a value for an instance of keyword 1910 in a particular language. Multiple instances of thesaural keyword 1912 can be used to express the value of an instance of keyword 1910 in multiple languages. Alternative expressions for the value of an instance of keyword 1910 can be retained by instances of thesaural keyword 1912 as well. Thus, the content or substance of an input data fragment can be expressed in multiple languages with a plurality of alternative expressions in each language. A preference can be associated with an instance of thesaural keyword 1912 to identify it as a preferred alternative in a given language.

FIG. 19C provides an illustration of instances of keyword 1910 and a plurality of associated label attributes according to an embodiment of the invention. A grid is displayed with axes 1986 and 1988. Instances of keyword 1910 are displayed along a vertical axis, axis 1986. A horizontal axis, axis 1988, contains examples of languages in which a label associated to an instance of keyword 1910 can be represented. Instances of thesaural keyword 1912 are depicted at the intersections of these two axes.

Each instance of thesaural keyword 1912 is an instantiation for an associated instance of keyword 1910. Each

instance of thesaural keyword 1912 contains a label that can be used as the label for an instance of keyword 1910. For example, thesaural keywords 1990A-1990D, 1991A-1991E, 1992A-1992B, and 1993A-1993B are instantiations of Keyword Instance One. Similarly, thesaural keywords 1994A-1994B, 1995A-1995B, 1996A-1996C, 1997A-1997B are instantiations of Keyword Instance Two.

An instance of thesaural keyword 1912 can be an instantiation of an instance of keyword 1910 in a particular language. For example, thesaural keywords 1991A-1991E are English instantiations of Keyword Instance One. The thesaural keywords 1991A-1991E provide alternate instantiations for Keyword Instance One. That is, each contains an English-language label for Keyword Instance One. Thus, Keyword Instance One can be associated with a different English-language label based on which instance of thesaural keywords 1991A-1991E is used to supply the label for Keyword Instance One. Similarly, Keyword Instance is associated with English-language alternatives contained in thesaural keywords 1995A-1995B.

Thus, within a language, an instance of keyword 1910 can have alternate instantiations of thesaural keyword 1912. An instance of keyword 1910 can also have alternate instantiations of thesaural keyword 1912 across multiple languages as exemplified in FIG. 19C. Alternate instantiations for Keyword Instance One exist in French (e.g., thesaural keywords 1990A-1990D), German (e.g., thesaural keywords 1992A-1992B), and Russian (e.g., thesaural keywords 1993A-1993B), for example. Similarly, Keyword Instance Two has alternative instantiations in French (e.g., thesaural keywords 1994A-1994B), German (e.g., thesaural keywords 1994A-1994C), Russian (e.g., thesaural keywords 1997A-1997B).

A preferred alternate instantiation of an instance of keyword 1910 can be identified in each of the languages in which the keyword instance is represented. Thus, for example, thesaural keyword instance 1990C can be identified as the preferred instantiation of Keyword Instance One for the French language. Similarly, thesaural keyword instances 1991B, 1992A, and 1993B can be the preferred English, German, and Russian (respectively) instantiations for Keyword Instance One. Thesaural keyword instances 1994A, 1995B, 1996C, and 1997A can be the preferred French, English, German, and Russian instances (respectively) for Keyword Instance Two.

Referring to FIG. 19A, type 1916 (also referred to herein as type 1504) is associated with keyword 1910. Type 1916 provides attribute information for keyword 1910. Type 1916 can be used to include instances of keyword 1910 in a classification or category. In other words, an instance of keyword 1910 is an instantiation of an instance of type 1916. For example, an instance of keyword 1910 having an attribute of "Ford Bronco" could be associated with a type instance having an attribute of "car". Another instance of keyword 1910 having an attribute of "Mustang" can also be associated with the same instance of type 1916. Both instances of keyword 1910 are instances of a car. One or more instances of type 1916 can be associated with an instance of keyword 1910. In the preferred embodiment, a hierarchy is established for instances of type 1916. An instance of type 1916 can be a parent to or a child of another other instances of type 1916. An instance of keyword 1919 that is associated with an instance of type 1916 is also associated with the hierarchy of the instance of type 1916.

Other attribute elements that can be associated with an input data fragment via phrase 1906 include person 1918,

and image 1920. Person 1918 identifies an individual associated with an input data fragment. In the previous example, a personal life experience may contain a reference to a person. An instance of person 1918 can be used to identify the reference. Person information 1926 provides attribute information for an instance of person 1918. An instance of image 1920 is used for data such as a still photograph that is referenced in the input data.

In the preferred embodiment of the invention, some elements, such as keyword 1910 and person 1918, must be approved before becoming actual instances. Prior to approval, the instances are considered to be proposed instances. For example, proposed keyword 1914 and proposed person 1924 are attribute elements used to identify instances of keyword 1910 and person 1918 that have not yet been approved as actual instances. Proposed instances are reviewed and a determination is made whether to transform the proposed attribute element into an actual attribute element or to otherwise dispose of the proposed attribute element.

Person Information 1926 is an attribute element associated with person 1918. A "one-to-one" relationship (relationship 1936) exists between person information 1926 and person 1918. Person information 1926 contains attributes for person 1918. The attributes of person information 1926 contain information for a person having an instance of person 1918.

Events can also be associated with input data. Each event becomes an instance of event 1908. As previously described, input data can be decomposed into input data fragments each of which is associated with an instance of phrase 1906. Input data can also be decomposed into input data fragments that are associated with instances of event 1908. A type attribute is associated with event 1908. Examples of an event type in the preferred embodiment include a segment, phrase, break between tapes, quality assurance details, facts, and miscellaneous (or other). An event can be used to access the associated input data fragment. An instance of event 1908 can be used to access an input data fragment. For example, an instance of event 1908 of type phrase can be used to locate the input data fragment associated with an instance of phrase 1906.

Another example of an event type is a quality assurance event. In the preferred embodiment of the invention, a quality assurance mechanism can be used to monitor the quality of the input data and provide feedback. Quality assurance events are used to mark the input data. An event can mark a positive, negative, or neutral quality assurance event. For example, video input data is being collected in multiple interviews. Each interview can be reviewed to identify parts of the interview process that are noteworthy. Where, for example, an interviewer does not follow-up with an interviewee to obtain additional details, a negative quality assurance event can be created. A positive event can be similarly created. An event that is neither positive nor negative (i.e., informational or neutral) can also be created. A report of quality assurance events can be generated and used to provide feedback to the persons involved in collecting the input data.

Relationships of Elements

In the preferred embodiment, catalogue and attribute elements are interrelated. Relationships are formed between two or more elements using the invention. FIG. 19B illustrates relationships formed between the elements identified in FIG. 19A according to an embodiment of the invention. A "many" relationship is signified using a double arrow. A "one" relationship is identified using a single arrow. Rela-

tionship 1928, for example, is a "many-to-many" relationship. That is, one or more instances of segment 1904 can be related to many instances of phrase 1906. Alternatively stated, segment 1904 contains one or more instances of phrase 1906. One instance of phrase 1906 can be related to multiple instances of segment 1904. That is, an instance of phrase 1906 is contained within one or more instances of segment 1904. As illustrated by relationship 1946, one or more instances of type 1916 can be related to other instances of type 1916.

A "many-to-many" relationship (relationship 1930) exists between phrase 1906 and proposed keyword 1914, keyword 1910, image/video 1920, proposed person 1924 and person 1918. An instance of phrase 1906 can be related to a set of proposed keywords, a set of keywords, a set of images and/or video, a set of proposed persons, and a set of persons, each set having zero or more members. Further, an instance of proposed keyword 1914, keyword 1910, image 1920, proposed person 1924 or person 1918 can be related to more than one instance of phrase 1906.

Relationship 1938 illustrates a "many-to-many" relationship between keyword 1910 and thesaural keyword 1912. An instance of keyword 1910 can be associated with one or more instances of thesaural keyword 1912. The same instance of thesaural keyword 1912 can be associated with one or more instances of keyword 1910.

As previously stated, instances of type 1916 can be interrelated with other instances of type 1916 via a type hierarchy. Relationship 1944 identifies an instance of type 1916 as a parent or child of another instance of type 1916. Similarly, the instances of keyword 1910 are interrelated via a keyword hierarchy. Keyword 1910 can be related to other instances of keyword 1910 via relationship 1942. Relationship 1942 identifies an instance of keyword 1910 as a parent or child of another instance of keyword 1910. Relationship 1944 relates keyword 1910 and type 1916. That is, one instance of keyword 1910 is related to an instance of type 1916. Conversely, an instance of type 1916 can be associated with multiple instances of keyword 1910.

Further, an instance of keyword 1910 can be related to many instances of type 1916 via relationships 1942 and 1946. That is, an instance of keyword 1910 has a type that is associated with an instance of type 1916. In addition, the instance of keyword 1910 inherits the types associated with the children of its associated instance of type 1916.

Person 1918 and person information 1926 have a "one-to-one" relationship via relationship 1928. Person 1918 and thesaural person 1922 are related via relationship 1934. Person 1918 can be associated with multiple instances of thesaural person 1922. An instance of thesaural person 1922 can be related to multiple instances of person 1918 via relationship 1934.

Segment 1904 is a container element. That is, as illustrated by relationship 1928, segment 1904 can contain multiple instances of phrase 1906. Segment 1904 is defined by the set of elements that it contains. For example, segment 1904 is, for example, a chapter segment, a testimony segment, or a general segment. Instances of phrase 1906 can be grouped in the order in which they occur in the input data in a chapter segment. As a testimony segment, segment 1904 contains a grouping of instances of 1904 associated with the input data. For example, a testimony segment can contain all instances of segment 1904 that are associated with a videotaped interview. Person 1918 can be related to segment 1904 via relationship 1932. At least one instance of person 1918 is related to an instance of segment 1904 that is a testimony segment via relationship 1932.

Relationship 1950 illustrates the relationship between instances of segment 1904 (i.e., a testimony segment) that act as a container for other instances of segment 1904. A general segment contains a set of instances of phrase 1906 that are not necessarily related to particular input data. A general segment can be a collection of phrases that meet a certain criteria. For example, a general segment can contain instances of phrase 1906 that are related to an instance of keyword 1910 having a value of "teacher".

Segment 1904 therefore identifies a group of catalogue elements (e.g., phrase 1906). An instance of segment 1904 can identify all catalogue element instances. Other instances of segment 1904 can identify a subset of catalogue elements. Thus, for example, an instance of segment 1904 can identify all instances of phrase 1906 or a subset of all of the instances of phrase 1906. The set including all instances of phrase 1906 is a catalogue. A smaller catalogues that contain a subset of all instances of phrase 1906 is also a catalogue. Within a catalogue, a smaller catalogue can be created by, for example, a query operation or user designation.

A set of catalogue elements can be identified by querying the attribute elements, for example. A query operation can be performed on the attribute elements to examine other attribute elements associated with a catalogue element. A query operation identifies a set of cataloguing elements (e.g., instances of phrase 1906) that satisfy the criteria specified in the query. A set of cataloguing elements identified in a query are grouped in an instance of segment 1904. A user can also specify a collection of phrases 1906 that can be grouped in an instance of segment 1904.

Attributes

FIG. 19A provides examples of attributes for catalogue and attribute elements according to an embodiment of the invention. Segment 1904 contains an identifier (ID), a descriptive phrase, and a set of phrases, for example. The phrases related to an instance of segment 1904 are included in the segment instance's set of phrases. A set is formed by creating relationships between the elements. FIG. 19B illustrates examples of the relationships that exist between elements in an embodiment of the invention. The relationships that form a set can be implemented using any of the known techniques known in the art. For example, the relationships can be implemented in a programming language using pointers. In a relational database management system, for example, the relationships can be formed using relations and primary and foreign keys.

Referring to FIG. 19A, phrase 1906 includes an input data ID (e.g., identifies the input data from which the phrase was generated), an ID, a descriptive phrase, In/Out timecodes (i.e., a corresponding location within the input data), a set of keywords, images, persons, proposed keywords, and proposed persons. Keyword 1910 includes an ID, and sets of types, thesaural keywords, child keywords and parent keywords. The child and parent keyword set form relationships for the keyword hierarchy. The set of thesaural keywords related to keyword 1910 contain keyword values or labels for keyword instance.

Person 1918 includes an ID, a primary name, an occupation, date of birth, and a set of proposed persons. Person information 1926 contains a person ID for the associated instance of person 1918. Person information 1926 contains one or more attributes for the associated instance of person 1918. The attribute information can vary depending on the multimedia information being catalogued. For example, the catalogued multimedia data may consist of interviews with individuals. An instance of person 1918 can be instantiated and associated with an interviewee. Person

information 1926 associated with the instance of person 1918 can then include biographical information of the interviewee. The multimedia data videotaped sporting events. In this case, an instance of person 1918 can be created for a person associated with the sporting event (e.g., player, referee, and broadcasting personnel). An instance of person information 1926 associated with the instance of person 1918 can include statistical information associated with the participant.

An event 1908 includes an ID, type (e.g., segment, phrase, interviewer, videographer, fact, or other), sub-type (e.g., a positive, negative, or informational event), timecodes, and a comment (or descriptive note).

Thesaural keyword 1912 includes an ID, a keyword ID (i.e., the ID for an instance of keyword 1910 for which the thesaural keyword instance is an alternative), a label (i.e., the value of the keyword instance to which the thesaural instance is related), a language of choice identifier (or language ID), a preferred flag, and a characteristic (or class). If set, the preferred flag specifies that the thesaural keyword instance is the preferred alternative for the related keyword instance in the language specified by the language ID. The characteristic attribute further defines the thesaural keyword instance. It can be used to identify that thesaural keyword instance is a slang word, for example.

An ID, timecode and locator are included as attributes for image 1920. The locator attribute is used to locate the digitized image, for example. Proposed keyword 1914 includes an ID and a label. It is also possible to include the attributes contained in keyword 1910 in proposed keyword 1914. Thus, the user that is proposing a new keyword can enter as much information regarding the proposed keyword. Proposed person 1924 includes an ID and name attribute. Like proposed keyword 1914, the attributes associated with person 1918 can be included in proposed person 1924. Type 1916 includes an ID and a label.

Elements and their relationships can be managed using a cataloguing mechanism and a relationship management mechanism. The cataloguing mechanism includes a user interface that includes a series of screens. During cataloguing, a user (e.g., a cataloguer) reviews the input data and causes elements to be instantiated and associated with the input data and other elements. Elements that already exist can be associated with the input data during cataloguing. In addition, a cataloguer can propose new elements and relationships. The relationship management facility is used to review the elements and relationships proposed by a cataloguer. The relationship management facility can also be used to create new elements and relationships.

Embodiment of Computer Execution Environment (Hardware)

An embodiment of the invention can be implemented as computer software in the form of computer readable code executed on a general purpose computer such as computer 1200 illustrated in FIG. 12, or in the form of bytecode class files executable within a Java runtime environment running on such a computer. A keyboard 1210 and mouse 1211 are coupled to a bidirectional system bus 1218. The keyboard and mouse are for introducing user input to the computer system and communicating that user input to processor 1213. Other suitable input devices may be used in addition to, or in place of, the mouse 1211 and keyboard 1210. I/O (input/output) unit 1219 coupled to bidirectional system bus 1218 represents such I/O elements as a printer, A/V (audio/video) I/O, etc.

Computer 1200 includes a video memory 1214, main memory 1215 and mass storage 1212, all coupled to

bi-directional system bus 1218 along with keyboard 1210, mouse 1211 and processor 1213. The mass storage 1212 may include both fixed and removable media, such as magnetic, optical or magnetic optical storage systems or any other available mass storage technology. Bus 1218 may contain, for example, thirty-two address lines for addressing video memory 1214 or main memory 1215. The system bus 1218 also includes, for example, a 32-bit data bus for transferring data between and among the components, such as processor 1213, main memory 1215, video memory 1214 and mass storage 1212. Alternatively, multiplex data/address lines may be used instead of separate data and address lines.

In one embodiment of the invention, the processor 1213 is a microprocessor manufactured by Motorola, such as the 680X0 processor or a microprocessor manufactured by Intel, such as the 80X86, or Pentium processor, or a SPARC microprocessor from Sun Microsystems, Inc. However, any other suitable microprocessor or microcomputer may be utilized. Main memory 1215 is comprised of dynamic random access memory (DRAM). Video memory 1214 is a dual-ported video random access memory. One port of the video memory 1214 is coupled to video amplifier 1216. The video amplifier 1216 is used to drive the cathode ray tube (CRT) raster monitor 1217. Video amplifier 1216 is well known in the art and may be implemented by any suitable apparatus. This circuitry converts pixel data stored in video memory 1214 to a raster signal suitable for use by monitor 1217. Monitor 1217 is a type of monitor suitable for displaying graphic images. Alternatively, the video memory could be used to drive a flat panel or liquid crystal display (LCD), or any other suitable data presentation device.

Computer 1200 may also include a communication interface 1220 coupled to bus 1218. Communication interface 1220 provides a two-way data communication coupling via a network link 1221 to a local network 1222. For example, if communication interface 1220 is an integrated services digital network (ISDN) card or a modem, communication interface 1220 provides a data communication connection to the corresponding type of telephone line, which comprises part of network link 1221. If communication interface 1220 is a local area network (LAN) card, communication interface 1220 provides a data communication connection via network link 1221 to a compatible LAN. Communication interface 1220 could also be a cable modem or wireless interface. In any such implementation, communication interface 1220 sends and receives electrical, electromagnetic or optical signals which carry digital data streams representing various types of information.

Network link 1221 typically provides data communication through one or more networks to other data devices. For example, network link 1221 may provide a connection through local network 1222 to local server computer 1223 or to data equipment operated by an Internet Service Provider (ISP) 1224. ISP 1224 in turn provides data communication services through the world wide packet data communication network now commonly referred to as the "Internet" 1225. Local network 1222 and Internet 1225 both use electrical, electromagnetic or optical signals which carry digital data streams. The signals through the various networks and the signals on network link 1221 and through communication interface 1220, which carry the digital data to and from computer 1200, are exemplary forms of carrier waves transporting the information.

Computer 1200 can send messages and receive data, including program code, through the network(s), network link 1221, and communication interface 1220. In the Internet example, remote server computer 1226 might transmit a

requested code for an application program through Internet 1225, ISP 1224, local network 1222 and communication interface 1220.

The received code may be executed by processor 1213 as it is received, and/or stored in mass storage 1212, or other non-volatile storage for later execution. In this manner, computer 1200 may obtain application code in the form of a carrier wave.

Application code may be embodied in any form of computer program product. A computer program product comprises a medium configured to store or transport computer readable code or data, or in which computer readable code or data may be embedded. Some examples of computer program products are CD-ROM disks, ROM cards, floppy disks, magnetic tapes, computer hard drives, servers on a network, and carrier waves.

The computer systems described above are for purposes of example only. An embodiment of the invention may be implemented in any type of computer system or programming or processing environment, including embedded devices (e.g., web phones, etc.) and "thin" client processing environments (e.g., network computers (NC's), etc.) that support a virtual machine.

Thus, a method and apparatus for cataloguing multimedia data using surveying data has been described in conjunction with one or more specific embodiments. The invention is defined by the claims and their full scope of equivalents.

What is claimed is:

1. In a computer system, associating multimedia data with surveying data comprising:

obtaining an association between survey data and at least one catalogue element of a catalogue, said at least one catalogue element associated with said multimedia data;

searching said survey data to identify said at least one catalogue element;

identifying said multimedia data using said at least one catalogue element.

2. The surveying method of claim 1 wherein said survey data comprises at least one survey element, said survey element comprises at least one attribute that associates said at least one survey element with said at least one catalogue element.

3. The method of claim 2 wherein said survey data comprises at least one question element.

4. The method of claim 2 wherein said survey data comprises at least one answer element.

5. The method of claim 2 wherein said at least one attribute identifies at least one segment element of said catalogue.

6. The method of claim 1 wherein said catalogue element is a phrase element.

7. The method of claim 1 wherein said catalogue element is a keyword, said identifying said multimedia data further comprises:

identifying at least one phrase associated with said keyword, said at least one phrase being associated with said multimedia data.

8. The method of claim 1 wherein said catalogue element is a type, said identifying said multimedia data further comprises:

identifying at least one keyword associated with said type;

identifying at least one phrase associated with said at least one keyword, said at least one phrase being associated with said multimedia data.

9. The method of claim 1 wherein said catalogue element is a segment, said identifying said multimedia data further comprises:

identifying at least one phrase associated with said segment, said at least one phrase being associated with said multimedia data.

10. A memory for storing survey information accessible by at least one computer program being executed on a machine, said survey information comprising:

a first set of elements stored in said memory, said first set of elements usable to retain survey data;

a second set of elements stored in said memory, said second set of elements being associated with at least one of said first set of elements, said second set of elements usable to retain catalogue data;

multimedia data in said memory, said multimedia data associated with said at least one of said first set of elements using said second set of elements.

11. The memory of claim 10 wherein said first set of elements comprises at least one survey element, said survey element comprises at least one attribute that associates said at least one survey element with said at least one catalogue element.

12. The memory of claim 11 wherein said first set of elements comprises at least one question element.

13. The memory of claim 11 wherein said first set of elements comprises at least one answer element.

14. The memory of claim 11 wherein said at least one attribute identifies at least one) segment element of said second set of elements.

15. The memory of claim 10 wherein said second set of elements comprises a keyword, said second set of elements further comprising:

at least one phrase associated with said keyword, said at least one phrase being associated with said multimedia data.

16. The memory of claim 10 wherein said second set of elements comprises a type element, said memory further comprising:

at least one keyword associated with said type;

at least one phrase associated with said at least one keyword, said at least one phrase being associated with said multimedia data.

17. The memory of claim 10 wherein said second set of elements comprises a segment, said memory further comprising:

at least one phrase associated with said segment, said at least one phrase being associated with said multimedia data.

18. A computer program product comprising:

a computer usable medium having computer readable program code embodied therein configured to associate multimedia data with surveying data comprising:

computer readable program code configured to cause a computer to obtain an association between survey data and at least one catalogue element of a catalogue, said at least one catalogue element associated with said multimedia data;

computer readable program code configured to cause a computer to search said survey data to identify said at least one catalogue element;

computer readable program code configured to cause a computer to identify said multimedia data using said at least one catalogue element.

19. The computer program product of claim 18 wherein said survey data comprises at least one survey element, said survey element comprises at least one attribute that associates said at least one survey element with said at least one catalogue element.

20. The computer program product of claim 19 wherein said survey data comprises at least one question element.

21. The computer program product of claim 19 wherein said survey data comprises at least one answer element.

22. The computer program product of claim 19 wherein said at least one attribute identifies at least one segment element of said catalogue.

23. The computer program product of claim 18 wherein said catalogue element is a phrase element.

24. The computer program product of claim 18 wherein said catalogue element is a keyword, said computer readable program code configured to cause a computer to identify said multimedia data further comprises:

computer readable program code configured to cause a computer to identify at least one phrase associated with said keyword, said at least one phrase being associated with said multimedia data.

25. The computer program product of claim 18 wherein said catalogue element is a type, said computer readable program code configured to cause a computer to identify said multimedia data further comprises:

computer readable program code configured to cause a computer to identify at least one keyword associated with said type;

computer readable program code configured to cause a computer to identify at least one phrase associated with said at least one keyword, said at least one phrase being associated with said multimedia data.

26. The computer program product of claim 18 wherein said catalogue element is a segment, said computer readable program code configured to cause a computer to identify said multimedia data further comprises:

computer readable program code configured to cause a computer to identify at least one phrase associated with said segment, said at least one phrase being associated with said multimedia data.

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UTILITY PATENT APPLICATION TRANSMITTAL <small>(Only for new nonprovisional applications under 37 C.F.R. § 1.53(b))</small>	Attorney Docket No.	84300.916
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UNITED STATES PATENT APPLICATION

FOR

**METHOD AND APPARATUS FOR
CATALOGUING MULTIMEDIA
DATA USING SURVEYING DATA**

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BACKGROUND OF THE INVENTION

1. FIELD OF THE INVENTION

This invention relates to the collection and entering of data associated with a survey or other data collection mechanism using a computer system and the use of the survey data in cataloging multimedia data.

2. BACKGROUND ART

Data is sought and collected from different sources and used to, for example, assist in making economic, marketing, etc. decisions. The collected data may be used to supplement historical information with personal experiences and to identify behavioral patterns. For example, the United States government collects census data from households that may be used by governmental entities and community organizations to allocate funds, develop social programs as well as by the business sector to locate factories, shopping centers, etc. Surveys may also be conducted by businesses to determine consumers' attitudes and behavior to assist in the research, development and marketing of products.

In a survey, data collection is typically conducted by posing a set of questions to a set of participants in person, over the phone or in writing, for example. The answers are typically recorded in written form and processed or analyzed in some manner. Existing techniques for analyzing data lack the ability to generate a cohesive data, or knowledge, base of responses across surveys which would facilitate data analysis. Further, existing systems do not provide the ability to relate a survey data base to a multimedia system.

Increasingly, computer systems are being used to present multimedia material. Such material is usually in the form of text, graphics, video, animation, and sound. Two or more of these data types are usually combined to form the multimedia data presented by the computer system. A computer system that is used to present multimedia material is called a multimedia system.

A cataloguing mechanism is useful to catalogue multimedia data in a multimedia system such that the multimedia data may be identified and retrieved by searching the catalogue. For example, it is beneficial to be able to associate descriptive information of a catalogue to segments of multimedia data. The descriptive information may be queried and used to identify relevant segments of multimedia data.

A problem exists in capturing descriptive information that may be used to catalogue multimedia data. One mechanism that has been used to collect information is a survey. It would be beneficial to be able to incorporate the results of a survey into a catalogue that may be used to search and retrieve multimedia data.

SUMMARY OF THE INVENTION

A method and apparatus is described wherein survey data collected from different survey versions may be retained in a cohesive data, or knowledge, base that may be used to catalogue multimedia data. A survey schema is defined that comprises survey elements that may be used to define surveys and capture survey data. In one or more embodiments of the invention, survey data comprising answers to survey questions is stored in one or more elements of the survey schema. Answer elements of the survey schema may be associated with one or more elements of a catalogue of multimedia data. The linked survey data may be used alone or in combination with the cataloguing system to retrieve multimedia data.

In addition to retaining survey answers, a survey schema comprises survey elements that may be used to build different forms or versions of a survey (a survey instance). Examples of elements of a survey schema used in embodiments of the invention include: section, question group, question, answer, data object, insert, choice group, choice item, for example. A section may be used to group question groups, inserts and sections. An insert may be used to capture repeatable data. A question group may be used to group questions. An answer is associated with each question and may also be associated with an insert. Any combination of questions may be used with any combination of data types for answers to the questions.

According to one or more embodiments of the invention, an answer value may be stored as an attribute of an answer element or as attribute (or attributes) of another element associated with an answer element (e.g., a data

object or answer text element). Examples of answer and data object types include text, boolean, date, location, movement, person and keyword. New answer and data object types and data objects may be dynamically added to the survey schema. For example, currency and health types may be added to

5 capture currency and health answers.

In one or more embodiments of the invention, survey data may be associated with elements of a multimedia data catalogue. In one or more embodiments of the invention, survey data comprising a survey, survey answers or both may be queried and the results of the query used to identify multimedia data. A

10 survey schema comprises elements that may be used to build a survey (or surveys) and store answers to survey questions. Elements of the survey may be linked to elements of a multimedia catalogue that are associated with the multimedia data. Survey data may be queried to identify a catalogue element and the multimedia data associated with the catalogue element.

15 In one or more embodiments of the invention, a phrase element of the catalogue is associated with a multimedia data item and with other catalogue elements such as keywords and persons. In one or more embodiments of the invention, an answer and/or question stored in a survey schema may comprise, or otherwise be associated with, catalogue elements such as a

20 keyword (or keywords) and/or a person (or persons). By identifying a catalogue element (or catalogue elements) in a query operation on an answer or question in a survey schema, it is possible to identify phrase elements. Thus, in one or more embodiments of the invention, an association is formed between survey data and multimedia data via one or more catalogue elements.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1A illustrates a schema comprising survey elements according to an embodiment of the invention.

5 Figure 1B provides an example of reusable survey elements according to an embodiment of the invention.

Figure 1C provides an example of a structure of a survey instance according to an embodiment of the invention.

FIGURES 2A to 2C illustrate
A ~~Figure 2 illustrates~~ elements of the survey schema of Figure 1A and attributes associated with survey elements according to one or more
10 embodiments of the invention.

Figure 3 illustrates an example of a window in a graphical user interface used to modify instances of section that comprise a survey instance according to an embodiment of the invention.

15 Figures 4A-4B illustrate add section and question panels according to an embodiment of the invention.

Figure 5 provides an example of a display that is used to edit an instance of question according to an embodiment of the invention.

Figure 6 illustrates a graphical user interface used to edit an instance of choice group according to one or more embodiments of the invention.

Figures 7, 8 and 9 provide examples of a graphical user interface for entering object information such as person, alias and location objects according to an embodiment of the invention.

Figure 10 illustrates a survey definition and generation process flow according to one or more embodiments of the invention.

Figure 11 provides an example of a graphical user interface illustrating a portion of a survey instance that may be used to capture data according to an embodiment of the invention.

Figure 12 is a block diagram of one embodiment of a computer system capable of providing a suitable execution environment for an embodiment of the invention.

Figures 13-15 provide an overview of associations between survey and multimedia data according to one or more embodiments of the invention.

Figures 16-18 illustrate process flows for identification of catalogue elements, such as phrase, related to survey elements.

Figure 19A provides an example of catalogue and attribute elements and their attributes according to an embodiment of the invention.

Figure 19B illustrates relationships formed between the elements identified in Figure 19A according to an embodiment of the invention.

Figure 19C provides an illustration of instances of keyword 1910 and a plurality of associated label attributes according to an embodiment of the invention.

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DETAILED DESCRIPTION OF THE INVENTION

A method and apparatus for cataloguing multimedia data using surveying data is described. In the following description, numerous specific details are set forth in order to provide a more thorough description of the present invention. It will be apparent, however, to one skilled in the art, that the present invention may be practiced without these specific details. In other instances, well-known features have not been described in detail so as not to obscure the invention.

In one or more embodiments of the invention, survey data comprising a survey, survey answers or both may be queried and the results of the query used to identify multimedia data. A survey schema comprises elements that may be used to build a survey (or surveys) and store answers to survey questions. Elements of the survey may be linked to elements of a multimedia catalogue that are associated with the multimedia data. Survey data may be queried to identify a catalogue element and the multimedia data associated with the catalogue element.

In one or more embodiments of the invention, a phrase element of the catalogue is associated with a multimedia data item and with other catalogue elements such as keywords and persons. In one or more embodiments of the invention, an answer and/or question stored in a survey schema may comprise, or otherwise be associated with, catalogue elements such as a keyword(s), phrase(s), segment(s), type(s) and/or a person(s).

By identifying a catalogue element (or catalogue elements) in a query operation on survey data (e.g., an answer or question), it is possible to identify phrase elements that are associated with the catalogue element. In one or more embodiments of the invention, the multimedia data is associated with the survey answer or question via the phrase element and its associated keywords and persons. That is, by identifying a keyword (or person) catalogue element that is associated with a phrase element and an answer (or question) survey element, it is possible to associate multimedia data to survey data and vice versa. Thus, in one or more embodiments of the invention, an association is formed between survey data and multimedia data via one or more catalogue elements.

Survey data may be linked using catalogue elements in addition to, or in replacement of, phrase, keyword or person catalogue elements. In one embodiment of the invention, a survey element may be associated with a segment element of the catalogue that is comprised of phrase elements each of which is associated with multimedia data.

For example, a testimony segment comprises multimedia data associated with a videotaped testimony, or interview, in which survey questions are presented and answered by a survey participant. Survey elements may include a testimony identifier that may be used to identify the testimony segment. The phrase elements associated with a testimony segment as well as the multimedia data associated with the phrase elements may be determined from the testimony segment.

Figures 13-15 provide an overview of an association between survey and multimedia data according to one or more embodiments of the invention. Survey data 1302 comprises elements that are associated with a catalogue 1304. Catalogue 1304 comprises that are related to multimedia data 1306.

5 In one embodiment of the invention, a cataloguing graphical user interface is used to create instances of elements of catalogue 1304 wherein multimedia data is viewed and information descriptive of the multimedia data is stored in elements of the catalogue 1304. In another embodiment of the invention, a surveying system is used to enter survey data (e.g., survey responses) which
10 may be used to populate attributes of elements of catalogue 1304.

In one embodiments of the invention, survey data 1302 comprises elements, such as question 1402 and answer 1404 of Figure 14, having some number of attributes. Catalogue 1304 comprises keyword 1406 and segment 1408 elements. As is described in more detail below, segment 1408 and keyword
15 1406 are related to multimedia data 1306 such that an identification of either an instance of keyword 1406, an instance of segment 1408 or both may be used to identify multimedia data 1306.

In an embodiment of the invention, instances of keyword 1406 may be related to instances of question 1402 and answer 1404. For example, it is possible to
20 define one or more instances of keyword 1406 as selectable as an answer to a survey question. An instance of answer 1404 may comprise an attribute (or attributes) that identifies one or more instances of keyword 1406.

Elements of survey data 1302 may comprise one or more attributes that identify instances of segment 1408. For example, in an embodiment of the invention, answer 1404 comprises a "testimonyid" attribute that may be used to identify an instance of segment 1408. That is, an attribute of answer 1404 may
5 be used to store a value that identifies an instance of segment 1408.

Referring to Figure 15, keyword 1406 and segment 1408 are associated with phrase 1502 in one or more embodiments of the invention. Phrase 1502 is associated with multimedia data 1306, or a portion thereof. It is possible using an association between phrase 1502 and either keyword 1406 or segment 1408
10 (or both) to identify an associated portion of multimedia data 1306. As is discussed in more detail below, phrase 1502 contains at least one attribute that may be used to identify multimedia data 1306, or a portion thereof. Elements of survey data 1302 and catalogue 1304 that are in some manner associated with phrase 1502 may be queried to identify instances of phrase 1502 and the
15 multimedia data 1306 related to phrase 1502.

For example, by identifying an instance of question 1402 or answer 1404 that is associated with one or more instances of keyword 1406 or segment 1408, it is possible to identify instances of phrase 1502 and the multimedia data 1306 that is associated with the instances of phrase 1502. In one or more embodiments
20 of the invention, question 1402 and answer 1404 may be associated with a type hierarchy that may be used to classify instances of keyword 1406. It is possible to identify instances of phrase 1502 using type 1504 and the association between type 1504 and keyword 1406. Figures 16-18 illustrate process flows for

identification of catalogue elements, such as phrase 1502, related to survey elements.

Figure 16 illustrates a process flow for identification of instances of phrase 1502 using instances of keyword 1406. Keyword 1406 may be associated with
5 question 1402 and answer 1404 of survey data 1302, for example. At step 1602, a set of keywords 1406 is identified from elements of survey data 1302.

For example, a question 1302 may be queried to identify keywords 1406 that are associated with question 1302. The results of the query may be used in conjunction with the process of Figure 16 to identify multimedia data 1306 that
10 may be displayed when question 1302 is presented in a survey to a survey participant, for example. To further illustrate, a query of instances of answer 1404 may yield a set of answers 1404 wherein an answer includes one or more instances of keyword 1406. The results of the query may be used in conjunction with the process of Figure 16 to identify multimedia data that may be displayed
15 as part of an answer to a survey question, for example.

At step 1604, a determination is made whether all of the keywords identified in step 1602 have been processed. If so, processing ends at step 1612. If not, processing continues at step 1606 to search catalogue 1304 for instances of phrase 1502 associated with the next keyword in the set created in step 1602.

20 At step 1608, a determination is made whether new instances of phrase 1608 were found in step 1606 (i.e., instances of phrase 1502 that were not found in a previous execution of step 1606). If not, processing continues at step 1604 to process any remaining keywords. If there are new instances of phrase 1502,

processing continues at step 1610 to add the new instances to a result comprising instances of phrase 1502, and processing continues at step 1604 to process any remaining keywords. The result comprises instances of phrase 1502 related to the survey element (or elements) related to instances of
5 keyword 1406 identified in step 1602. The multimedia data 1306 related to the instances of phrase 1502 in the result may be identified using the instances of phrase 1502.

Type 1504 may be associated with elements of survey data 1302 and keyword 1406 and thus may be used to identify a set of related multimedia data 1306.
10 Figure 17 illustrates a process flow for retrieval of instances of phrase 1502 using instances of type 1504. Type 1504 may be associated with elements of survey data 1302. At step 1702, a set of types is identified that comprises instances of type 1504 that are related to one or more elements of survey data 1302 (e.g., to an instance (or instances) of question 1402 or answer 1404, or
15 both).

At step 1704, a determination is made whether all of the types identified in step 1702 have been processed. If so, processing ends at step 1716. If not, processing continues at step 1706 to search catalogue 1304 for instances of keyword 1406 that are related to the next instance of type 1504 in the set. At
20 step 1708, a determination is made whether all of the keywords identified in step 1706 have been processed. If so, processing continues at step 1704 to process any remaining types. If not, processing continues at step 1710 to search catalogue 1305 for instances of phrase 1502 associated with the next keyword in the set created in step 1706.

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At step 1712, a determination is made whether new instances of phrase 1502 were found in step 1710 (i.e., instances of phrase 15002 that were not found in a previous execution of step 1710). If not, processing continues at step 1708 to process any remaining keywords. If there are new instances of keyword 1406, processing continues at step 1714 to add the new instances to a result comprising instances of phrase 1502, and processing continues at step 1708 to process any remaining keywords. The result comprises instances of phrase 1502 related to the survey element (or elements) related to instances of type 1504 identified in step 1702. The multimedia data 1306 related to the instances of phrase 1502 in the result may be identified using the instances of phrase 1502.

Elements of survey data 1302 may be related to an instance (or instances) of segment 1408. Using a relationship between segment 1408 and phrase 1502, it is possible to identify the multimedia data 1306 that is associated with an element of survey data 1302 that is related to segment 1408. Figure 18 illustrates a process flow for identification of instances of phrase 1502 using instances of segment 1408.

At step 1802, a set of segments is identified that comprises instances of segment 1408 that are related to one or more elements of survey data 1302 (e.g., to an instance (or instances) of answer 1404, a data object, or both).

At step 1804, a determination is made whether all of the segments identified in step 1802 have been processed. If so, processing ends at step 1812. If not, processing continues at step 1806 to search catalogue 1304 for instances of phrase 1502 that are related to the next instance of segment 1408 in the set.

At step 1808, a determination is made whether new instances of phrase 1608 were found in step 1806 (i.e., instances of phrase 1502 that were not found in a previous execution of step 1806). If not, processing continues at step 1804 to process any remaining segments. If there are new instances of segment 1408, processing continues at step 1810 to add the new instances to a result which comprises instances of phrase 1502, and processing continues at step 1804 to process any remaining segments. The result comprises instances of phrase 1502 related to the survey element (or elements) via instances of segment 1408 identified in step 1806. The multimedia data 1306 related to the instances of phrase 1502 in the result may be identified using the instances of phrase 1502.

Figures 16-18 are discussed with reference to the question 1402 and answer 1404 elements of survey data 1302. It should be apparent that other elements of survey data 1302 may be used as well. For example, in one or more embodiments of the invention, survey data 1302 comprises data objects that may be used to store an answer to a survey question. Examples of data objects include person, alias, and location. It is possible to search survey data using one or more data objects as well as other elements of survey data 1302. Similarly, other catalogue elements may be related to survey data or used to identify multimedia data.

SURVEY DATA

In one or more embodiments of the invention, survey data comprises a survey schema that comprises survey elements that may be used to define surveys and capture survey data. In one or more embodiments of the invention, survey data comprising answers to survey questions is stored in one

or more elements of the survey schema. Answer elements of the survey schema may be associated with one or more elements of a catalogue that may be used as indices into multimedia data. In one or more embodiments of the invention, a catalogue comprises keywords organized in a hierarchy and categorized according to a type hierarchy, phrases and segments, for example.

Survey data may be collected from different survey versions into a cohesive data, or knowledge, base or other storage mechanism. Each survey version may comprise different sets of questions and different types of answers to the questions. In an embodiment of the invention, at least one relational database may be used to store survey schema, survey instances and participant data. However, it should be apparent that other storage mechanisms (e.g., file system) may be used. Data may be collected and retained in a cohesive store for each participant regardless of the survey form or instance used.

A survey schema comprises survey elements that may be used to build different forms or versions of a survey (a survey instance). Examples of elements of a survey schema used in embodiments of the invention include: section, question group, question, answer, data object, insert, choice group, choice item, for example. A survey instance may be defined using elements of a survey schema. For example, a survey instance may comprise some number of sections each of which may comprise some number of sections (or subsections), inserts and question groups. A question group may comprise questions. An answer is associated with each question and may also be associated with an insert. Any combination of questions may be used with any combination of

data types for answers to the questions. An existing survey instance may be dynamically modified by adding, deleting or modifying survey elements.

In one or more embodiments of the invention, the schema includes a question element that is used to define survey questions. Questions may be grouped using a question group element. Questions and answer types may be dynamically added to the survey schema and added to a survey instance created using the survey schema. An association is created between a question and an answer via the question and answer elements.

According to one or more embodiments of the invention, a survey schema includes an answer element that identifies a data type that may be a simple or complex data type. A simple data type typically involves a single value while a complex data type may involve multiple values. In one or more embodiments of the invention, simple data is stored in an attribute of an instance of answer or another element associated with the answer instance (e.g., answer text). Complex data is stored in more than one attribute such as in attributes of a data object that is related (directly or indirectly) to an answer element. Thus, an answer value may be stored as an attribute of an answer element or as attribute (or attributes) of another element associated with an answer element (e.g., a data object or answer text element). Examples of answer and data object types include text, boolean, date, location, movement, person and keyword. New answer and data object types and data objects may be dynamically added to the survey schema.

Survey answers that are retained in the survey data base (e.g., in answer, answer text and data object elements) may comprise links to elements

of a catalogue that is associated with multimedia data. For example, an answer to a survey question may comprise one or more keywords that are components of a catalogue into the multimedia data.

5 A special type of survey element referred to as an insert may be repeated none or more times in a survey. An insert may be used, for example, to accommodate repeatable survey information. For example, a survey may include questions requesting a person's educational background (e.g., undergraduate and graduate collegial background). An insert may be used to capture each collegial experience, for example.

10 Question group elements are reusable in a survey such that more than one instance of a question in a question group may share the same identifier. Thus, it is possible to correlate answers to question instances using the same identifier.

Survey Schema

15 According to one or more embodiments of the invention, a schema is defined that identifies a generic survey structure and includes survey elements that may be used to create survey instances and capture data collected for each survey instance. Figure 1A illustrates a schema comprising survey elements according to an embodiment of the invention.

20 In one or more embodiments of the invention, a survey instance (or survey form) 150, created using a schema such as survey schema 160, comprises one or more instances of section 102. Section 102 may include a number of instances of section 102 (or subsections), insert 104 or question group 106.

Insert 104 represents an element that may be repeated in survey instance 150. Insert 104 may be used to dynamically add components to a survey instance 150 to capture repeatable data which may occur when there can be multiple answers to a question or questions, for example. A section may contain
5 questions requesting information regarding the automobiles that a participant's has purchased. An insert may be used to group answers associated with each of the automobiles.

A subsection is an instance of section 102 that is contained within another instance of section 102. In one or more embodiments of the invention, there
10 may be a hierarchy of instances of section 102 defined in survey schema 160 and/or used in a survey instance 150.

An instance of section 102 is related to another instance of section 102 via relationship 126 such that an instance of section 102 may contain (or be
15 contained in) multiple instances of section 102. Insert 104 is related to section 102 via relationship 130 such that multiple instances of insert 104 may be associated with section 102. Section 102 may contain none or more instances of insert 104. Section 102 may be associated with, and contain, none or more instances of question group 106 as is illustrated by relationship 132.

Question group 106 may be used to group a number of instances of
20 question 108. Question group 106 may contain more than one question 108. Question 108 may be included in more than one question group 106.

In one or more embodiments of the invention, a set of selection items (each identifying a valid answer selection) may be associated with a question. A

selection is identified by a choice item 114. Choice group 112 is used to group a number of instances of choice item 114 to an instance of question 108. Where a choice group 112 is associated with question 108, a value of answer 110 may be identified by selecting one of a number of choices identified by instances of
5 choice item 114 comprising choice group 112.

In one or more embodiments of the invention, choice item 114 may be one selection item, or value. For example, an instance of choice item 114 may specify an instance of keyword 110 (i.e., an attribute value associated with keyword 110). Alternatively, choice item 114 may identify a class that
10 comprises a plurality of selection items. For example, choice item 114 may identify an instance of type 118, where type 118 represents a class of selection items (e.g., a class of keywords). A class of selection items comprises selection items (e.g., instances of keyword 116) that are of type 118. Thus, choice group 112 may comprise instances of choice item 114 which may be a combination of
15 none or more individual selection items and none or more classes of selection items.

An answer may be a simple or complex answer. A simple data type typically involves a single value while a complex data type may involve multiple values. In one or more embodiments of the invention, simple data is
20 stored in an attribute of an instance of answer or another element associated with the answer instance (e.g., answertext). Complex data is stored in more than one attribute such as in attributes of a data object that is related (directly or indirectly) to an answer element.

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In one or more embodiments of the invention, an answer to an instance of question 108 may be stored in answer 110, answerText 120 and/or data object 122. A single-value answer may be stored in an attribute of answer 110 (e.g., a value stored in attribute 266, "answertext" ^{OF FIGURES 2A-2C} ~~of Figure 2~~). None or more instances of answerText 120 may be used to store additional answer text of a question 108. In an embodiment of the invention, a survey element referred to as data object 122 may be used to store a multi-value answer. In an embodiment of the invention, multiple instances of data object 122 may be used to store a multi-value answer to question 108. An attribute of one data object 122 may be stored as attributes of data object 122. Thus, an instance of data object 122 may be associated with another instance of data object 122 and answer 110, for example.

In an embodiment of the invention, data object 122 includes, but is not limited to, person, alias, date, movements and location objects each of which comprise a set of attributes that may be used to store values of a multi-value answer. A person data object may have first name, middle name, last name, date of birth, gender, type, title, etc. attributes, for example. Embodiments of the invention may include additional or different data objects 122 or have additional or different attributes.

Survey schema 160 is used to create none or more survey instances 150. Survey instance 150 may be in a print, electronic or other form, for example. In one or more embodiments of the invention, survey instance 150 may be displayed in a graphical user interface (GUI) which may be used to capture survey data. The GUI may be used by a survey participant to enter answers, or

by another party who enters a participant's answers recorded on a hardcopy of a survey instance 150, for example.

In one or more embodiments of the invention, a survey instance 150 that is displayed in a GUI or otherwise may comprise some number (i.e., none or more) of instances of elements of survey schema 160. Figure 1C provides an example of structure of a survey instance according to an embodiment of the invention. Survey instance 150 comprises some number of section 102, question group 106, question 108, choice group 112, choice item 114, etc. Question 108 identifies an answer 110 that is to be used in capturing an answer (or answers) to the question. Answer 110 may identify a data object, or other schema element, that may be used in storing answer values. Instances of answer 110, answer text 120 and object 122 may be added to a survey instance 150 to store answers to a question 108. Insert 104 may be associated with instances of section 102 and instances of insert 104 may be dynamically added during data capture to capture repeatable data, and answer 110 may be associated with an insert 104.

Survey schema 160 may be used to create any number of survey instance 150 each of which may vary in their structure including but not limited to section 102, question group 106, question 108, answer 110 and/or the types of answers that are expected for each question. Answers associated with each of survey instance 150 may be captured into a cohesive data store (e.g., a relational database or databases).

Survey Schema Element Attributes

In one or more embodiments of the invention, attributes of elements of survey schema 160 comprise attributes that may be used to store information concerning components of a survey instance 150 and data collected for a survey instance 150 (e.g., participant data). ~~Figure 2 illustrates~~ **Figures 2A to 2C illustrate** elements of survey schema 160 of Figure 1A and attributes associated with survey elements according to one or more embodiments of the invention.

Section 102 includes a section identifier attribute 202 ("SectionID") that uniquely identifies each instance of section 102. A parent identifier attribute 204 ("ParentID") identifies a subsection's parent instance of section 102. Attributes 206 and 208 indicate whether an instance of section 102 may have inserts (e.g., instances of insert 104) and the type of insert(s), respectively. Section name attribute 280 ("SectionName") comprises a name or title of an instance of section 102.

In one or more embodiments of the invention, element 130 of survey schema 160 is used to relate section 102 and question group 106 in a many-to-many relationship. That is, section 102 may include none or more instances of question group 106, and none or more instances of section 102 may contain the same instance of question group 106. Instances of element 130 may be identified using attribute 210 ("SectionQ_id"). Attributes 212 and 214 relate an instance of section 102 using its identifier (section identifier 150) and an instance of question group 106 using its identifier (question group identifier 216, "QGroup_id"), respectively.

Question 108 includes a question identifier 220 ("QuestionID") to identify each instance. Attribute 218 associates an instance of question 108 with an instance of question group 106. Answer type attribute 222 identifies an answer type for question 108. Where the type of answer is a complex data object, attribute 228 identifies the type of data object (e.g., person 128, location 124 and alias 126). Attribute 226 contains the text of the question. Attribute 230 identifies whether an answer 110 associated with an instance of question 108 is repeatable.

Choice group 112 includes a choice group identifier 240 ("ChoiceGroupID") that identifies an instance. Choice group identifier 240 is used in choice item 114 (attribute 242) to associate an instance of choice group 112 with an instance of choice item 114. Attributes 244 and 246 of choice item 114 to identify one selection item or a class of selection items, respectively.

Insert 104 includes an identifier attribute 248 ("Insert_id") that identifies an instance. Insert 104 is used to identify a repeatable data in a survey instance 150. Attribute 250 ("SectionID") associates an instance of insert 104 to an instance of section 102. Attribute 278 ("InsertType") identifies a type of insert:

An instance of answer 110 may be identified using attribute 252 ("AnswerID"). Attribute 254 ("QuestionID") associates an instance of answer 110 and an instance of question 108. An instance of answer 110 may be associated with an instance of insert 104 via attribute 256 ("InsertID"). A value that is an answer to a question may be stored in attribute 266 ("answertext"). Additional answer values may be stored in attribute 292 ("answertext") of element 120 which may be associated with answer 110 using attribute 290. Alternatively, a

data object may be used to store a multi-value answer. Attributes 262 and 264 may be used to associate an answer 110 with a data object 122. Attribute 260 ("AnswerType") specifies the type of answer. Examples of answer types include boolean, plain text, object (e.g., data.object) and single select. Person 128, alias 5 126 and location 124 are examples of data object 122. Person 128 includes attributes associated with a person (e.g., name, gender, date of birth, etc.) Attribute 268 ("PersonID") is used to identify an instance of person 128. A new answer type may be added by specifying a new value for attribute 260 associated with the new answer, or data, type.

10 Another example of data object 122, alias 126 may be used to store another identity associated with, for example, a person. Attribute 272 ("AliasID") is used to identify an instance of alias 126. Attribute 274 relates an instance of person 128 and alias 126. Location 124 includes attributes for storing location information (e.g., city, state, country, street address, etc.). Attribute 276 15 is used to identify an instance of location 124.

In one embodiment of the invention, for example, multiple instances of question 108 may be created with the same identifier. None or more instances of answer 110 relate to one instance of question 108. Alternatively, more than one instance of question 108 having the same identifier may be associated with 20 none or more instances of answer 110. That is, a survey element such as question 108 may be reused such that multiple instances of question 108 are given the same identifier. Thus, the same identifier may be used to identify one or more instances of the element thus facilitating a query for information associated with the reusable element.

For example, all instances of answer 110 related to an instance (or instances) of question 108 may be retrieved by querying for one value of attribute 220 (i.e., "QuestionID"). Question group 106 further includes attribute 286 which indicates whether question group 106 is reusable. In a reusable question group 106, instances of the same question 108 are given the same identifier across instances of question group 106.

Figure 1B provides an example of a question 108 in a reusable question group 106 according to an embodiment of the invention. Section instances 180A-180D are generated using section 102 of survey schema 160. In each of section instances 180A-180D, Attribute 202 is populated with a value that may be used to identify the instance. For example, section instances 180A-180D have identifiers of "S1," "S2," "S3," and "S4," respectively. Section instances 180A-180D may be included in the same or a different survey instance 150.

In this example, each of section instances 180A-180D is associated with an instance of question group (i.e., question groups 182A-182D, respectively). Attribute 216 of question group 106 is assigned an identifier value in each of question groups 182A-182D. In the example of Figure 1B, identifier values for question groups 182A-182D are "QC1," "QC2," "QC3" and "QC4," respectively. A different value is used to uniquely identify each instance.

Question groups 182A-182D are reusable such that questions 184A-184D within each have the same identifier. As a member of a reusable component of a survey, questions 184A-184D have the same identifier (i.e., "Q1").

Answers 186A-186D are instances of answer 110 that represent answers to questions 184A-184D, respectively. An identifier is assigned to each of answers 186A-186D (i.e., "A₁," "A₂," "A₃" and "A₄").

5 It is possible to retrieve answers associated with questions 184A-184D using the same identifier. That is, it is possible to find all answers to a question whose identifier is equal to "Q₁." If each of questions 184A-184D had different identifiers, it would be necessary to identify the value of each identifier prior to retrieving the answers associated with each question .

In one or more embodiments, answer 110 may be be repeatable.
10 Attribute 230 of question 108 identifies an answer as being repeatable.

Process Overview

In one or more embodiments of the invention, schema 160 is used to create multiple survey instances 150. Figure 10 illustrates a survey definition and generation process flow according to one or more embodiments of the
15 invention.

At block 1002, survey schema 160 is defined. For example, elements of survey schema 160 may be added, deleted or modified. Instances of section 102, question group 106, question 108, answer 110, data object 122, and choice group 112 may be added, deleted or modified, for example. Relationships
20 between elements of survey schema 160 may be added, deleted or modified. For example, an instance of question 108 may be added to or removed from a question group 106. Similarly, a question group 106 may be added to or removed from a section 102. An insert 104 may be added to or removed from

a section 102. A choice item 114 may be added to or removed from a choice group 112, and a choice group 112 may be added to or removed from a question 108.

In one or more embodiments of the invention, a new answer type may be added to schema 160. Each answer type has an associated value (e.g., a numeric value). Question 108 and answer 110 include an attribute (e.g., "Answertype," attributes 222 and 260, respectively) that identify the answer type associated with each. In an embodiment of the invention, an answer type associated with question 108 or answer 110 may be changed by modifying an attribute of question 108 or answer 110. Similarly, a data object 122 (e.g., person 128, alias 126 and location 124) that is associated with question 108 or answer 110 may be changed by modifying attribute values (e.g., attributes 228 and 262, respectively).

At block 1004, a survey instance 150 may be defined using a survey schema 160 defined in block 1004. A survey instance 150 may comprise none or more instances of section 102, question group 106, question 108, choice group 112, insert 104, answer 110, choice item 114, etc. It is possible, in one or more embodiments of the invention, to define survey schema 160 and survey instance 150 simultaneously. For example, it is possible to define an element of schema 160 (e.g., using step 1102) for use in a survey instance 150 at step 1004. A survey designer may make use of the elements of survey schema 160 to define a survey instance 150 as well as define additional elements of survey schema 160.

In one or more embodiments of the invention, one data object 122 may be related to another data object 122 as part of an answer. For example, alias 126 may be related to person 128 and store alias information (e.g., a nickname or other name) associated with a person.

5 Insert 104 may be used to group answers to questions. For example, a participant may provide more than one set of answers to questions in an instance of section 102. Each set of answers may be associated with an instance of insert 104.

Survey Example

10 In one or more embodiments of the invention, a graphical user interface is used to define schema 160, define survey instance 150 and capture data from a survey instance 150 (e.g., to perform steps 1002, 1004 and 1006 of Figure 10).

Survey Data Capture GUI

15 Figure 11 provides an example of a GUI illustrating a portion of a survey instance 150 that may be used to capture data according to an embodiment of the invention. It should be apparent that embodiments of the invention are not limited to the survey example of Figure 11.

20 In the example of Figure 11, window 1102 depicts a portion of a survey instance 150 used to capture holocaust survivor information. Each survivor (i.e., survey participant) is asked for biographical information including general information in addition to prewar, wartime and post-wartime experiences. Data may be entered using window 1102 from a printed version of a survey

instance 150, or directly by a participant, for example. Area 1104 provides a list of sections 102 of the survey instance 150. According to one or more embodiments of the invention, a user enters survey data by selecting, or opening, sections (e.g., sections 1106 and 1108) in area 1104.

5 Section 1108 is opened which indicates that it has been selected while sections 1106 are closed or collapsed in this example. In one or more embodiments of the invention, display 1110 identifies instances of question group 106 of an open instance of section 102 (e.g., section 1108) is displayed. An instance of question group 106 in display 1110 may be selected such as question
10 group selection 1112 which is shaded to indicate that it has been selected. Instances of question 108 that are associated with question group selection 1112 are displayed in area 1114 of window 1102.

 Area 1114 comprises columns 1116, 1118 and 1120. In this embodiment of the invention, answer type may also be displayed as a further prompt to the
15 user. For example, entry 1130A indicates that the answer that is expected is a boolean answer (e.g., "yes" or "no"). Entry 1130B indicates that a plain text answer is expected for the question. Entries 1130C and 1130D indicate that instances of data object 122 (i.e., location 124 and person 128) are the expected type for these questions.

20 Answer text is displayed in columns 1118 and 1120. Instances of choice item 114 may be displayed in area 1122. Thus, for example, when an instance of question 108 displayed in column 1116 is selected, instances of choice item 114 that are associated with the selected instance of question 108 are displayed in area 1122.

Area 1124 may be used to display possible answer selections associated with a question that is displayed in area 1114. For example, entry 1130D expects an instance of person 128 as an answer. Column 1126 may be used to display existing instances of person 128 that may be selected as an answer. Column 5 1128 of area 1124 may also be used to enter a proposed answer to a question. The proposed answer is retained, subsequently reviewed, and either accepted or rejected. If accepted, the proposed answer becomes an answer to the question and may become a selectable answer to another question. If rejected, a proposed answer is removed, and another answer may be provided.

10 *Survey Definition GUI*

Figure 3 illustrates an example of a window in a GUI used to modify instances of section 102 that comprise a survey instance 150 according to an embodiment of the invention. In display 302, a window is shown which is comprised of instances of section 102, question group 106 and question 108.

15 Panel 304 displays instances of section 102 (sections 306 and 308) within an instance of form 150. Sections 306 are collapsed such that instances of question group 106 are not displayed. Section 308 is expanded to display instances of question group 106 within section 308 (e.g., question groups 310 and 312). Question group 312 is selected in panel 304 such that instances of 20 question 108 are displayed in panel 316 and the name (i.e., section name attribute 280) is displayed in panel 314.

Panel 316 displays attribute values associated with instances of question 108. Column 320 of panel 316 identifies the question text (i.e., attribute 226) of

five instances associated with question 108. Column 318 of panel 316 identifies answer types (e.g., retained in attribute 222) associated with each question. Columns 322, 326 and 328 display values for attributes 284, 228 and 230 of question 108, respectively. Column 324 displays the name of an instance of choice group 112 that groups choices, or answer selections, for a question.

Using buttons 330, 332, 334 and 336, a survey developer may add a section, delete a section, add a question, delete a question respectively. Figures 4A-4B illustrate add section and question panels according to an embodiment of the invention.

Referring to Figure 4A, panel 402 may be used, in one or more embodiments of the invention, to add a section (i.e., to survey schema 160 and/or survey instance 150). Pull down menu area 404 is used to display instances of section 102 to select a parent section where the new instance of section 102 is a subsection of another instance of section 102. Text field 406 may be used to enter a name (e.g., attribute 280) of the new instance of section 102. Check box 412 may be selected to specify whether an instance of insert 104 is associated with an instance of section 102. Pull down menus 408 may be used to display instances of insert 104 to identify types of inserts that are allowed. The save button 410 is used to save the new instance of section 102 in survey schema 160.

A new instance of question group 106 may be added, in one or more embodiments of the invention, using panel 422 of Figure 4B. Pull down menu 424 displays instances of section 102 to select a section 102 that includes an instance of question group 106 as a member. Text field 426 may be used to

enter a title for an instance of question group 106. Check box 430 identifies the instance of question group 422 as a reusable question group (i.e., set attribute 286 of question group 106). Save button 428 commits the new instance to survey schema 160 as an instance of question group 106.

5 Instances of question 108 may be added, modified or deleted from survey schema 160 or a survey instance 150. Figure 5 provides an example of a display (i.e., panel 502) that is used to edit an instance of question 108 according to an embodiment of the invention. Fields 516 and 504 identify the name associated with an instance of question group 106 and the text of the question
10 associated with an instance of question 108, respectively. An answer type may be selected from answer type selections 510. Where the answer type is an object, pull down menu 512 may be used to display instances of object 122 for selection. Pull down menu 514 may be used to display instances of choice group 112 to associate answer choices to an instance of question 108.

15 Figure 6 illustrates a user interface used to edit an instance of choice group 112 according to one or more embodiments of the invention. Display 602 includes a listing, in panel 604, of instances of choice group 112. Selecting one of the entries in panel 604 causes information associated with the selected instance of choice group 112 to be displayed in panels 610 and 614. Panel 616
20 displays instances of type 118 and keyword 116 for selection.

Panel 610 identifies instances of choice item 114. A choice or class of choices may be dragged from panel 616 to panel 614. A choice (e.g., an instance of keyword 116) that is dragged from panel 616 to panel 614 is displayed in panels 614 and 610. A class of choices (e.g., type 118) is displayed in panel 614

and the choices within the class are displayed in panel 610. None or more of the choices within a class of choices may be excluded from the choices by dragging the choice from panel 610 to trash 618.

Entry 608 in panel 610 indicates that the instance of choice item 114
5 derives from a class of choices. Entry 612 of panel 614 identifies a class of choices (i.e., "concentration camps").

In one or more embodiments of the invention, an answer to a question may comprise a single answer or multiple answers. Answer 110 includes an attribute (e.g., attribute 266, "answertext") that may store a single answer such
10 as a date, a boolean (e.g., "yes" or "no"), currency and text. Alternatively, answer 110 may contain a pointer to an instance of object 122 that comprises one or more attributes that contain the answer. Examples of object 122 include a person object, alias object and location object. Figures 7, 8 and 9 provide examples of a GUI for entering object information such as person, alias and
15 location objects according to an embodiment of the invention.

Referring to Figure 7, panel 702 may be used, in one or more embodiments of the invention, to enter information about a person. Pull down menu 704 is used to display and identify a relationship between the person surveyed and the person that is a part of the answer. Fields 706 are used to
20 enter information related to the person answer. Text field 708 may be used to enter a note about the person. Pull down menus 710 may be used to identify an alias associated with the person answer (e.g., a name to which the person is also known).

Figure 8 provides an example of a panel 802 that may be used to enter alias object information. Pull down menu 804 may be used to display and identify another survey element (e.g., person object) for which the alias object is an alias. Fields 806 identify the alias name, title, etc. Pull down menu 808 is used to display and select an alias type. Text field 810 may be used to input additional notes.

In an embodiment of the invention, if an answer to a question is a location, a location object is used. Figure 9 provides a display of a panel 902 that may be used to specify a location answer according to one or more embodiments of the invention.

Pull down menu 906 is used to display and select a location type. Fields 908 are used to enter information associated with the attributes of a location object. Column 910 is used to receive a text entry. Column 912 may be used to display a selection made from class items associated with a given attribute.

Panel 904 may be used to display choices for one of the fields in column 912 that has been selected. A choice is selected, in one or more embodiments of the invention, by dragging it from panel 904 to the selected field (e.g., field 914).

CATALOGUE

In one or more embodiments of the invention, catalogue 1304 used in one or more embodiments of the invention comprises catalogue elements. As discussed above, one catalogue element, a phrase (e.g., phrase 1502 or phrase 1906 of Figures 19A-19C), may be associated with a portion of multimedia data 1306. A phrase has a plurality of attributes some of which are attribute

elements. The attribute elements that are attributes of a phrase include keyword, person, image, video (e.g., documentary footage), proposed person, and proposed keyword. The keyword, person, image, proposed person and proposed keyword attribute elements can have attributes that are also attribute
5 elements. For example, attribute elements that are attributes of the keyword attribute element include thesaural keyword, thesaural person, keyword, and type. An index is built on the attributes and attribute elements. The index can be used to navigate through the catalogue (e.g., search for phrases).

Figure 19A provides an example of catalogue and attribute elements and
10 their attributes according to an embodiment of the invention. Segment 1904 (also referred to herein as segment 1408) is a container element. It can contain other elements. For example, segment 1904 can contain one or more instances of phrase 1906. In the invention, input data is decomposed into one or more pieces, or fragments. An instance of phrase 1906 is associated with each input
15 data fragment. Phrase 1906 is a catalogue element. Phrase 1906 has one or more attributes and/or attribute elements on which an index is built. The index can be used to navigate through the catalogue.

An attribute of phrase 1906 is keyword 1910 (also referred to herein as keyword 1406). An instance of phrase 1906 can be associated with one or more
20 instances of keyword 1910. Keyword 1910 further defines aspects of an input data fragment. Preferably, an attribute of keyword 1910 identifies content, or substance, for an input data fragment. The content or substance identified by keyword 1910 is preferably expressed as a single word. However, content or substance can be expressed using multiple words.

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To illustrate, the input data can be a videotape. The videotape is, for example, that of an interview, or survey, conducted with a survivor of the Holocaust. The interview is broken down into the interviewee's pre-war, war-time, and post-war experiences. The interviewee's pre-war experience can be broken down into topics (e.g., each of which may be instantiated as a section 126). A pre-war topic might be the interviewee's personal life, for example. Each topic can be broken down into sub-topics (each of which may be instantiated as subsections, or instances of section 126). In the example of the interviewee's personal life, a sub-topic might be the interviewee's relationship with family members, experiences at school, etc. Each sub-topic contains an information item. To further illustrate using the current example, an information item might be *home, brother, sister, teacher, etc.* In this example, the topic of the interviewee's personal life becomes an instance of segment 1904. The interviewee's relationship with family members and experiences at school become instances of phrase 1906. The words *home, brother, sister, and teacher* become instances of keyword 1910. The words *home, brother, sister and teacher* provide information regarding the content or substance of an input data fragment.

An instance of keyword 1910 can be associated with one or more instances of thesaural keyword 1912. An instance of thesaural keyword 1912 is an instantiation of an instance of keyword 1910. Thesaural keyword 1912 specifies a value or label for its associated instance of keyword 1910. Thesaural keyword 1912 can be one or more words. Thesaural keyword 1912 can be used, for example, to specify a value for an instance of keyword 1910 in a particular language. Multiple instances of thesaural keyword 1912 can be used

to express the value of an instance of keyword 1910 in multiple languages. Alternative expressions for the value of an instance of keyword 1910 can be retained by instances of thesaural keyword 1912 as well. Thus, the content or substance of an input data fragment can be expressed in multiple languages with a plurality of alternative expressions in each language. A preference can be associated with an instance of thesaural keyword 1912 to identify it as a preferred alternative in a given language.

Figure 19C provides an illustration of instances of keyword 1910 and a plurality of associated label attributes according to an embodiment of the invention. A grid is displayed with axes 1986 and 1988. Instances of keyword 1910 are displayed along a vertical axis, axis 1986. A horizontal axis, axis 1988, contains examples of languages in which a label associated to an instance of keyword 1910 can be represented. Instances of thesaural keyword 1912 are depicted at the intersections of these two axes.

Each instance of thesaural keyword 1912 is an instantiation for an associated instance of keyword 1910. Each instance of thesaural keyword 1912 contains a label that can be used as the label for an instance of keyword 1910. For example, thesaural keywords 1990A-1990D, 1991A-1991E, 1992A-1992B, and 1993A-1993B are instantiations of Keyword Instance One. Similarly, thesaural keywords 1994A-1994B, 1995A-1995B, 1996A-1996C, 1997A-1997B are instantiations of Keyword Instance Two.

An instance of thesaural keyword 1912 can be an instantiation of an instance of keyword 1910 in a particular language. For example, thesaural keywords 1991A-1991E are English instantiations of Keyword Instance One.

Thesaural keywords 1991A-1991E provide alternate instantiations for Keyword Instance One. That is, each contains a English-language label for Keyword Instance One. Thus, Keyword Instance One can be associated with a different English-language label based on which instance of thesaural keywords 5 1991A-1991E is used to supply the label for Keyword Instance One. Similarly, Keyword Instance is associated with English-language alternatives contained in thesaural keywords 1995A-1995B.

Thus, within a language, an instance of keyword 1910 can have alternate instantiations of thesaural keyword 1912. An instance of keyword 1910 can also 10 have alternate instantiations of thesaural keyword 1912 across multiple languages as exemplified in Figure 19C. Alternate instantiations for Keyword Instance One exist in French (e.g., thesaural keywords 1990A-1990D), German (e.g., thesaural keywords 1992A-1992B), and Russian (e.g., thesaural keywords 1993A-1993B), for example. Similarly, Keyword Instance Two has alternative 15 instantiations in French (e.g., thesaural keywords 1994A-1994B), German (e.g., thesaural keywords 1994A-1994C), Russian (e.g., thesaural keywords 1997A-1997B).

A preferred alternate instantiation of an instance of keyword 1910 can be identified in each of the languages in which the keyword instance is 20 represented. Thus, for example, thesaural keyword instance 1990C can be identified as the preferred instantiation of Keyword Instance One for the French language. Similarly, thesaural keyword instances 1991B, 1992A, and 1993B can be the preferred English, German, and Russian (respectively) instantiations for Keyword Instance One. Thesaural keyword instances 1994A, 1995B, 1996C, and

1997A can be the preferred French, English, German, and Russian instances (respectively) for Keyword Instance Two.

Referring to Figure 19A, type 1916 (also referred to herein as type 1504) is associated with keyword 1910. Type 1916 provides attribute information for keyword 1910. Type 1916 can be used to include instances of keyword 1910 in a classification or category. In other words, an instance of keyword 1910 is an instantiation of an instance of type 1916. For example, an instance of keyword 1910 having an attribute of "Ford Bronco" could be associated with a type instance having an attribute of "car". Another instance of keyword 1910 having an attribute of "Mustang" can also be associated with the same instance of type 1916. Both instances of keyword 1910 are instances of a car. One or more instances of type 1916 can be associated with an instance of keyword 1910. In the preferred embodiment, a hierarchy is established for instances of type 1916. An instance of type 1916 can be a parent to or a child of another other instances of type 1916. An instance of keyword 1919 that is associated with an instance of type 1916 is also associated with the hierarchy of the instance of type 1916.

Other attribute elements that can be associated with an input data fragment via phrase 1906 include person 1918, and image 1920. Person 1918 identifies an individual associated with an input data fragment. In the previous example, a personal life experience may contain a reference to a person. An instance of person 1918 can be used to identify the reference. Person information 1926 provides attribute information for an instance of person 1918. An instance of image 1920 is used for data such as a still photograph that is referenced in the input data.

In the preferred embodiment of the invention, some elements, such as keyword 1910 and person 1918, must be approved before becoming actual instances. Prior to approval, the instances are considered to be proposed instances. For example, proposed keyword 1914 and proposed person 1924 are attribute elements used to identify instances of keyword 1910 and person 1918 that have not yet been approved as actual instances. Proposed instances are reviewed and a determination is made whether to transform the proposed attribute element into an actual attribute element or to otherwise dispose of the proposed attribute element.

Person Information 1926 is an attribute element associated with person 1918. A "one-to-one" relationship (relationship 1936) exists between person information 1926 and person 1918. Person information 1926 contains attributes for person 1918. The attributes of person information 1926 contain information for a person having an instance of person 1918.

Events can also be associated with input data. Each event becomes an instance of event 1908. As previously described, input data can be decomposed into input data fragments each of which is associated with an instance of phrase 1906. Input data can also be decomposed into input data fragments that are associated with instances of event 1908. A type attribute is associated with event 1908. Examples of an event type in the preferred embodiment include a segment, phrase, break between tapes, quality assurance details, facts, and miscellaneous (or other). An event can be used to access the associated input data fragment. An instance of event 1908 can be used to access an input data

fragment. For example, an instance of event 1908 of type phrase can be used to locate the input data fragment associated with an instance of phrase 1906.

Another example of an event type is a quality assurance event. In the preferred embodiment of the invention, a quality assurance mechanism can be used to monitor the quality of the input data and provide feedback. Quality assurance events are used to mark the input data. An event can mark a positive, negative, or neutral quality assurance event. For example, video input data is being collected in multiple interviews. Each interview can be reviewed to identify parts of the interview process that are noteworthy. Where, for example, an interviewer does not follow-up with an interviewee to obtain additional details, a negative quality assurance event can be created. A positive event can be similarly created. An event that is neither positive nor negative (i.e., informational or neutral) can also be created. A report of quality assurance events can be generated and used to provide feedback to the persons involved in collecting the input data.

Relationships of Elements

In the preferred embodiment, catalogue and attribute elements are interrelated. Relationships are formed between two or more elements using the invention. Figure 19B illustrates relationships formed between the elements identified in Figure 19A according to an embodiment of the invention. A "many" relationship is signified using a double arrow. A "one" relationship is identified using a single arrow. Relationship 1928, for example, is a "many-to-many" relationship. That is, one or more instances of segment 1904 can be related to many instances of phrase 1906. Alternatively stated, segment

1904 contains one or more instances of phrase 1906. One instance of phrase 1906 can be related to multiple instances of segment 1904. That is, an instance of phrase 1906 is contained within one or more instances of segment 1904. As illustrated by relationship 1946, one or more instances of type 1916 can be
5 related to other instances of type 1916.

A "many-to-many" relationship (relationship 1930) exists between phrase 1906 and proposed keyword 1914, keyword 1910, image/video 1920, proposed person 1924 and person 1918. An instance of phrase 1906 can be related to a set of proposed keywords, a set of keywords, a set of images and/or video, a set
10 of proposed persons, and a set of persons, each set having zero or more members. Further, an instance of proposed keyword 1914, keyword 1910, image 1920, proposed person 1924 or person 1918 can be related to more than one instance of phrase 1906.

Relationship 1938 illustrates a "many-to-many" relationship between
15 keyword 1910 and thesaural keyword 1912. An instance of keyword 1910 can be associated with one or more instances of thesaural keyword 1912. The same instance of thesaural keyword 1912 can be associated with one or more instances of keyword 1910.

As previously stated, instances of type 1916 can be interrelated with
20 other instances of type 1916 via a type hierarchy. Relationship 1944 identifies an instance of type 1916 as a parent or child of another instance of type 1916. Similarly, the instances of keyword 1910 are interrelated via a keyword hierarchy. Keyword 1910 can be related to other instances of keyword 1910 via relationship 1942. Relationship 1942 identifies an instance of keyword 1910 as a

parent or child of another instance of keyword 1910. Relationship 1944 relates keyword 1910 and type 1916. That is, one instance of keyword 1910 is related to an instance of type 1916. Conversely, an instance of type 1916 can be associated with multiple instances of keyword 1910.

5 Further, an instance of keyword 1910 can be related to many instances of type 1916 via relationships 1942 and 1946. That is, an instance of keyword 1910 has a type that is associated with an instance of type 1916. In addition, the instance of keyword 1910 inherits the types associated with the children of its associated instance of type 1916.

10 Person 1918 and person information 1926 have a "one-to-one" relationship via relationship 1928. Person 1918 and thesaural person 1922 are related via relationship 1934. Person 1918 can be associated with multiple instances of thesaural person 1922. An instance of thesaural person 1922 can be related to multiple instances of person 1918 via relationship 1934.

15 Segment 1904 is a container element. That is, as illustrated by relationship 1928, segment 1904 can contain multiple instances of phrase 1906. Segment 1904 is defined by the set of elements that it contains. For example, segment 1904 is, for example, a chapter segment, a testimony segment, or a general segment. Instances of phrase 1906 can be grouped in the order in
20 which they occur in the input data in a chapter segment. As a testimony segment, segment 1904 contains a grouping of instances of 1904 associated with the input data. For example, a testimony segment can contain all instances of segment 1904 that are associated with a videotaped interview. Person 1918 can be related to segment 1904 via relationship 1932. At least one instance of

person 1918 is related to an instance of segment 1904 that is a testimony segment via relationship 1932.

Relationship 1950 illustrates the relationship between instances of segment 1904 (i.e., a testimony segment) that act as a container for other instances of segment 1904. A general segment contains a set of instances of phrase 1906 that are not necessarily related to particular input data. A general segment can be a collection of phrases that meet a certain criteria. For example, a general segment can contain instances of phrase 1906 that are related to an instance of keyword 1910 having a value of "teacher".

Segment 1904 therefore identifies a group of catalogue elements (e.g., phrase 1906). An instance of segment 1904 can identify all catalogue element instances. Other instances of segment 1904 can identify a subset of catalogue elements. Thus, for example, an instance of segment 1904 can identify all instances of phrase 1906 or a subset of all of the instances of phrase 1906. The set including all instances of phrase 1906 is a catalogue. A smaller catalogues that contain a subset of all instances of phrase 1906 is also a catalogue. Within a catalogue, a smaller catalogue can be created by, for example, a query operation or user designation.

A set of catalogue elements can be identified by querying the attribute elements, for example. A query operation can be performed on the attribute elements to examine other attribute elements associated with a catalogue element. A query operation identifies a set of cataloguing elements (e.g., instances of phrase 1906) that satisfy the criteria specified in the query. A set of cataloguing elements identified in a query are grouped in an instance of

segment 1904. A user can also specify a collection of phrases 1906 that can be grouped in an instance of segment 1904.

Attributes

Figure 19A provides examples of attributes for catalogue and attribute elements according to an embodiment of the invention. Segment 1904 contains an identifier (ID), a descriptive phrase, and a set of phrases, for example. The phrases related to an instance of segment 1904 are included in the segment instance's set of phrases. A set is formed by creating relationships between the elements. Figure 19B illustrates examples of the relationships that exist between elements in an embodiment of the invention. The relationships that form a set can be implemented using any of the known techniques known in the art. For example, the relationships can be implemented in a programming language using pointers. In a relational database management system, for example, the relationships can be formed using relations and primary and foreign keys.

Referring to Figure 19A, phrase 1906 includes an input data ID (e.g., identifies the input data from which the phrase was generated), an ID, a descriptive phrase, In/Out timecodes (i.e., a corresponding location within the input data), a set of keywords, images, persons, proposed keywords, and proposed persons. Keyword 1910 includes an ID, and sets of types, thesaural keywords, child keywords and parent keywords. The child and parent keyword set form relationships for the keyword hierarchy. The set of thesaural keywords related to keyword 1910 contain keyword values or labels for keyword instance.

Person 1918 includes an ID, a primary name, an occupation, date of birth, and a set of proposed persons. Person information 1926 contains a person ID for the associated instance of person 1918. Person information 1926 contains one or more attributes for the associated instance of person 1918. The attribute information can vary depending on the multimedia information being catalogued. For example, the catalogued multimedia data may consist of interviews with individuals. An instance of person 1918 can be instantiated and associated with an interviewee. Person information 1926 associated with the instance of person 1918 can then include biographical information of the interviewee. The multimedia data videotaped sporting events. In this case, an instance of person 1918 can be created for a person associated with the sporting event (e.g., player, referee, and broadcasting personnel). An instance of person information 1926 associated with the instance of person 1918 can include statistical information associated with the participant.

An event 1908 includes an ID, type (e.g., segment, phrase, interviewer, videographer, fact, or other), sub-type (e.g., a positive, negative, or informational event), timecodes, and a comment (or descriptive note).

Thesaural keyword 1912 includes an ID, a keyword ID (i.e., the ID for an instance of keyword 1910 for which the thesaural keyword instance is an alternative), a label (i.e., the value of the keyword instance to which the thesaural instance is related), a language of choice identifier (or language ID), a preferred flag, and a characteristic (or class). If set, the preferred flag specifies that the thesaural keyword instance is the preferred alternative for the related keyword instance in the language specified by the language ID. The

characteristic attribute further defines the thesaural keyword instance. It can be used to identify that thesaural keyword instance is a slang word, for example.

An ID, timecode and locator are included as attributes for image 1920.

The locator attribute is used to locate the digitized image, for example.

5 Proposed keyword 1914 includes an ID and a label. It is also possible to include the attributes contained in keyword 1910 in proposed keyword 1914. Thus, the user that is proposing a new keyword can enter as much information regarding the proposed keyword. Proposed person 1924 includes an ID and name attribute. Like proposed keyword 1914, the attributes associated with person
10 1918 can be included in proposed person 1924. Type 1916 includes an ID and a label.

Elements and their relationships can be managed using a cataloguing mechanism and a relationship management mechanism. The cataloguing mechanism includes a user interface that includes a series of screens. During
15 cataloguing, a user (e.g., a cataloguer) reviews the input data and causes elements to be instantiated and associated with the input data and other elements. Elements that already exist can be associated with the input data during cataloguing. In addition, a cataloguer can propose new elements and relationships. The relationship management facility is used to review the
20 elements and relationships proposed by a cataloguer. The relationship management facility can also be used to create new elements and relationships.

EMBODIMENT OF COMPUTER EXECUTION ENVIRONMENT (HARDWARE)

An embodiment of the invention can be implemented as computer software in the form of computer readable code executed on a general purpose computer such as computer 1200 illustrated in Figure 12, or in the form of
5 bytecode class files executable within a Java runtime environment running on such a computer. A keyboard 1210 and mouse 1211 are coupled to a bi-directional system bus 1218. The keyboard and mouse are for introducing user input to the computer system and communicating that user input to processor 1213. Other suitable input devices may be used in addition to, or in
10 place of, the mouse 1211 and keyboard 1210. I/O (input/output) unit 1219 coupled to bi-directional system bus 1218 represents such I/O elements as a printer, A/V (audio/video) I/O, etc.

Computer 1200 includes a video memory 1214, main memory 1215 and mass storage 1212, all coupled to bi-directional system bus 1218 along with
15 keyboard 1210, mouse 1211 and processor 1213. The mass storage 1212 may include both fixed and removable media, such as magnetic, optical or magnetic optical storage systems or any other available mass storage technology. Bus 1218 may contain, for example, thirty-two address lines for addressing video memory 1214 or main memory 1215. The system bus 1218 also includes, for
20 example, a 32-bit data bus for transferring data between and among the components, such as processor 1213, main memory 1215, video memory 1214 and mass storage 1212. Alternatively, multiplex data/address lines may be used instead of separate data and address lines.

In one embodiment of the invention, the processor 1213 is a microprocessor manufactured by Motorola, such as the 680X0 processor or a microprocessor manufactured by Intel, such as the 80X86, or Pentium processor, or a SPARC microprocessor from Sun Microsystems, Inc. However, any other suitable microprocessor or microcomputer may be utilized. Main memory 1215 is comprised of dynamic random access memory (DRAM). Video memory 1214 is a dual-ported video random access memory. One port of the video memory 1214 is coupled to video amplifier 1216. The video amplifier 1216 is used to drive the cathode ray tube (CRT) raster monitor 1217. Video amplifier 1216 is well known in the art and may be implemented by any suitable apparatus. This circuitry converts pixel data stored in video memory 1214 to a raster signal suitable for use by monitor 1217. Monitor 1217 is a type of monitor suitable for displaying graphic images. Alternatively, the video memory could be used to drive a flat panel or liquid crystal display (LCD), or any other suitable data presentation device.

Computer 1200 may also include a communication interface 1220 coupled to bus 1218. Communication interface 1220 provides a two-way data communication coupling via a network link 1221 to a local network 1222. For example, if communication interface 1220 is an integrated services digital network (ISDN) card or a modem, communication interface 1220 provides a data communication connection to the corresponding type of telephone line, which comprises part of network link 1221. If communication interface 1220 is a local area network (LAN) card, communication interface 1220 provides a data communication connection via network link 1221 to a compatible LAN. Communication interface 1220 could also be a cable modem or wireless

interface. In any such implementation, communication interface 1220 sends and receives electrical, electromagnetic or optical signals which carry digital data streams representing various types of information.

5 Network link 1221 typically provides data communication through one or more networks to other data devices. For example, network link 1221 may provide a connection through local network 1222 to local server computer 1223 or to data equipment operated by an Internet Service Provider (ISP) 1224. ISP 1224 in turn provides data communication services through the world wide packet data communication network now commonly referred to as the
10 "Internet" 1225. Local network 1222 and Internet 1225 both use electrical, electromagnetic or optical signals which carry digital data streams. The signals through the various networks and the signals on network link 1221 and through communication interface 1220, which carry the digital data to and from computer 1200, are exemplary forms of carrier waves transporting the
15 information.

Computer 1200 can send messages and receive data, including program code, through the network(s), network link 1221, and communication interface 1220. In the Internet example, remote server computer 1226 might transmit a requested code for an application program through Internet 1225, ISP 1224,
20 local network 1222 and communication interface 1220.

The received code may be executed by processor 1213 as it is received, and/or stored in mass storage 1212, or other non-volatile storage for later execution. In this manner, computer 1200 may obtain application code in the form of a carrier wave.

Application code may be embodied in any form of computer program product. A computer program product comprises a medium configured to store or transport computer readable code or data, or in which computer readable code or data may be embedded. Some examples of computer
5 program products are CD-ROM disks, ROM cards, floppy disks, magnetic tapes, computer hard drives, servers on a network, and carrier waves.

The computer systems described above are for purposes of example only. An embodiment of the invention may be implemented in any type of computer system or programming or processing environment, including
10 embedded devices (e.g., web phones, etc.) and "thin" client processing environments (e.g., network computers (NC's), etc.) that support a virtual machine.

Thus, a method and apparatus for cataloguing multimedia data using surveying data has been described in conjunction with one or more specific embodiments.
15 The invention is defined by the claims and their full scope of equivalents.

CLAIMS

1. In a computer system, associating multimedia data with surveying data comprising:

obtaining an association between survey data and at least one catalogue

5 element of a catalogue, said at least one catalogue element associated with said multimedia data;

searching said survey data to identify said at least one catalogue element;

identifying said multimedia data using said at least one catalogue element.

2. The surveying method of claim 1 wherein said survey data comprises at

10 least one survey element, said survey element comprises at least one attribute that associates said at least one survey element with said at least one catalogue element.

3. The method of claim 2 wherein said survey data comprises at least one question element.

15 4. The method of claim 2 wherein said survey data comprises at least one answer element.

5. The method of claim 2 wherein said at least one attribute identifies at least one segment element of said catalogue.

6. The method of claim 1 wherein said catalogue element is a phrase element.

multimedia data in said memory, said multimedia data associated with said at least one of said first set of elements using said second set of elements.

11. The memory of claim 10 wherein said first set of elements comprises at least one survey element, said survey element comprises at least one attribute that
5 associates said at least one survey element with said at least one catalogue element.

12. The memory of claim 11 wherein said first set of elements comprises at least one question element.

13. The memory of claim 11 wherein said first set of elements comprises at least
10 one answer element.

14. The memory of claim 11 wherein said at least one attribute identifies at least one segment element of said second set of elements.

15. The memory of claim 10 wherein said second set of elements comprises a keyword, said second set of elements further comprising:

15 at least one phrase associated with said keyword, said at least one phrase being associated with said multimedia data.

16. The memory of claim 10 wherein said second set of elements comprises a type element, said memory further comprising:

at least one keyword associated with said type;

20 at least one phrase associated with said at least one keyword, said at least one phrase being associated with said multimedia data.

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17. The memory of claim 10 wherein said second set of elements comprises a segment, said memory further comprising:

at least one phrase associated with said segment, said at least one phrase being associated with said multimedia data.

5 18. A computer program product comprising:

a computer usable medium having computer readable program code embodied therein configured to associate multimedia data with surveying data comprising:

10 computer readable program code configured to cause a computer to obtain an association between survey data and at least one catalogue element of a catalogue, said at least one catalogue element associated with said multimedia data;

computer readable program code configured to cause a computer to search said survey data to identify said at least one catalogue element;

15 computer readable program code configured to cause a computer to identify said multimedia data using said at least one catalogue element.

19. The computer program product of claim 18 wherein said survey data comprises at least one survey element, said survey element comprises at least one attribute that associates said at least one survey element with said at least
20 one catalogue element.

20. The computer program product of claim 19 wherein said survey data comprises at least one question element.

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- 21. The computer program product of claim 19 wherein said survey data comprises at least one answer element.
- 22. The computer program product of claim 19 wherein said at least one attribute identifies at least one segment element of said catalogue.
- 5 23. The computer program product of claim 18 wherein said catalogue element is a phrase element.
- 24. The computer program product of claim 18 wherein said catalogue element is a keyword, said computer readable program code configured to cause a computer to identify said multimedia data further comprises:
 - 10 computer readable program code configured to cause a computer to identify at least one phrase associated with said keyword, said at least one phrase being associated with said multimedia data.
- 25. The computer program product of claim 18 wherein said catalogue element is a type, said computer readable program code configured to cause a computer
 - 15 to identify said multimedia data further comprises:
 - computer readable program code configured to cause a computer to identify at least one keyword associated with said type;
 - computer readable program code configured to cause a computer to identify at least one phrase associated with said at least one keyword, said at least one
 - 20 phrase being associated with said multimedia data.

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26. The computer program product of claim 18 wherein said catalogue element is a segment, said computer readable program code configured to cause a computer to identify said multimedia data further comprises:

5 computer readable program code configured to cause a computer to identify at least one phrase associated with said segment, said at least one phrase being associated with said multimedia data.

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ABSTRACT OF THE INVENTION

A method and apparatus is described wherein survey data collected from different survey versions may be retained in a cohesive data, or knowledge, base that may be used to catalogue multimedia data. A survey schema is defined that comprises survey elements that may be used to define surveys and capture survey data. In one or more embodiments of the invention, survey data may be linked to a multimedia cataloguing system. The linked survey data may be used alone or in combination with the cataloguing system to retrieve multimedia data.

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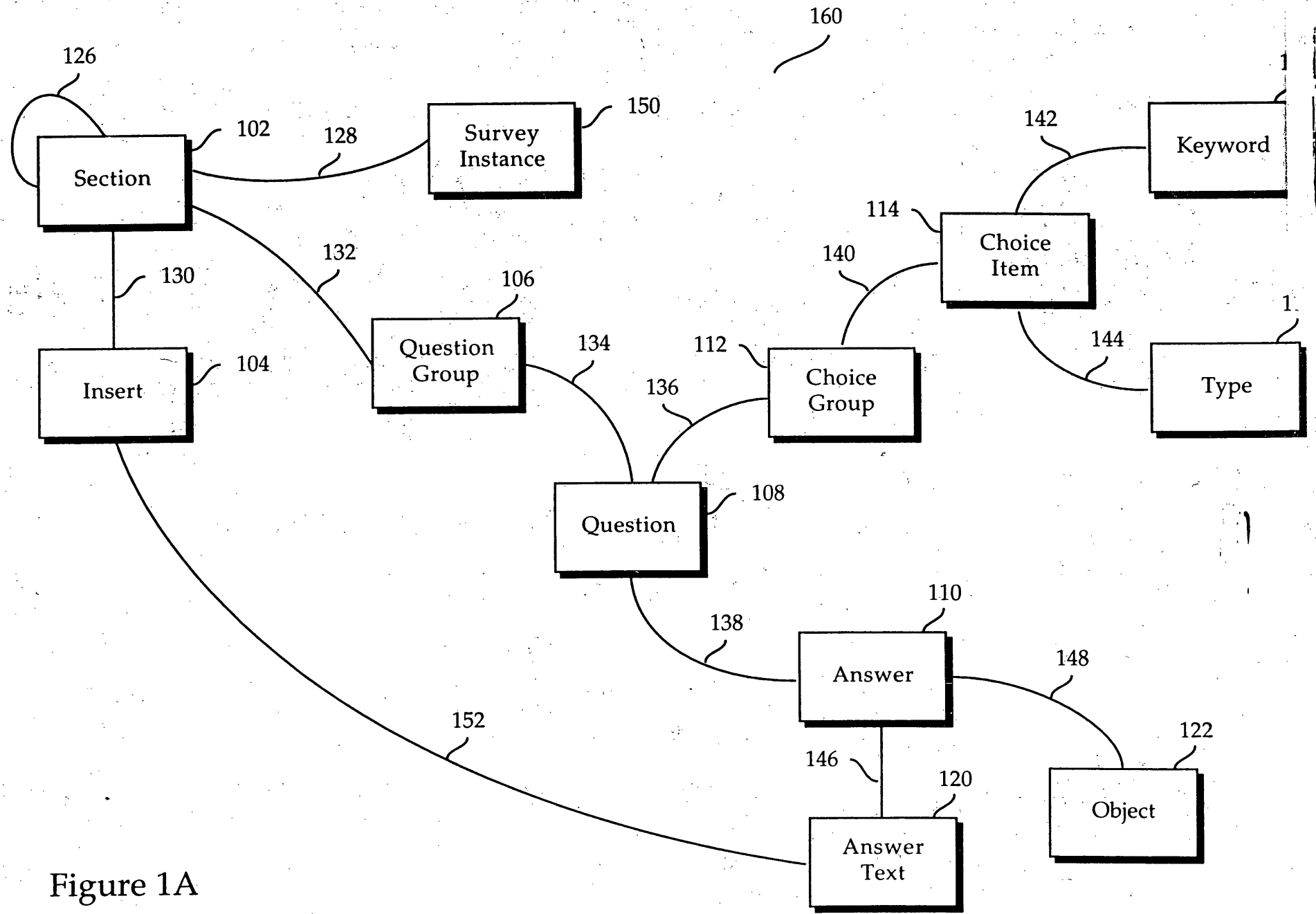


Figure 1A

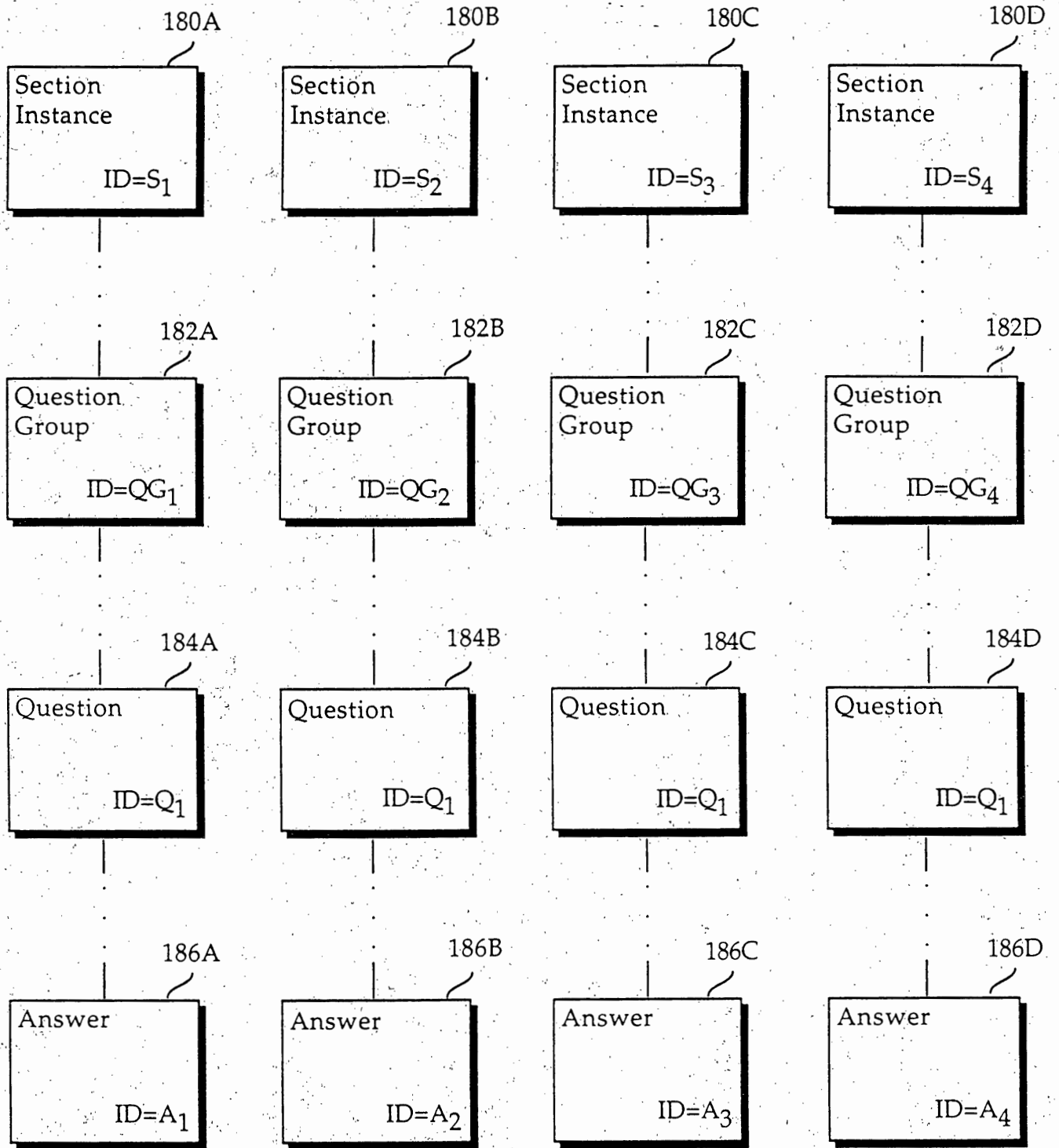


Figure 1B

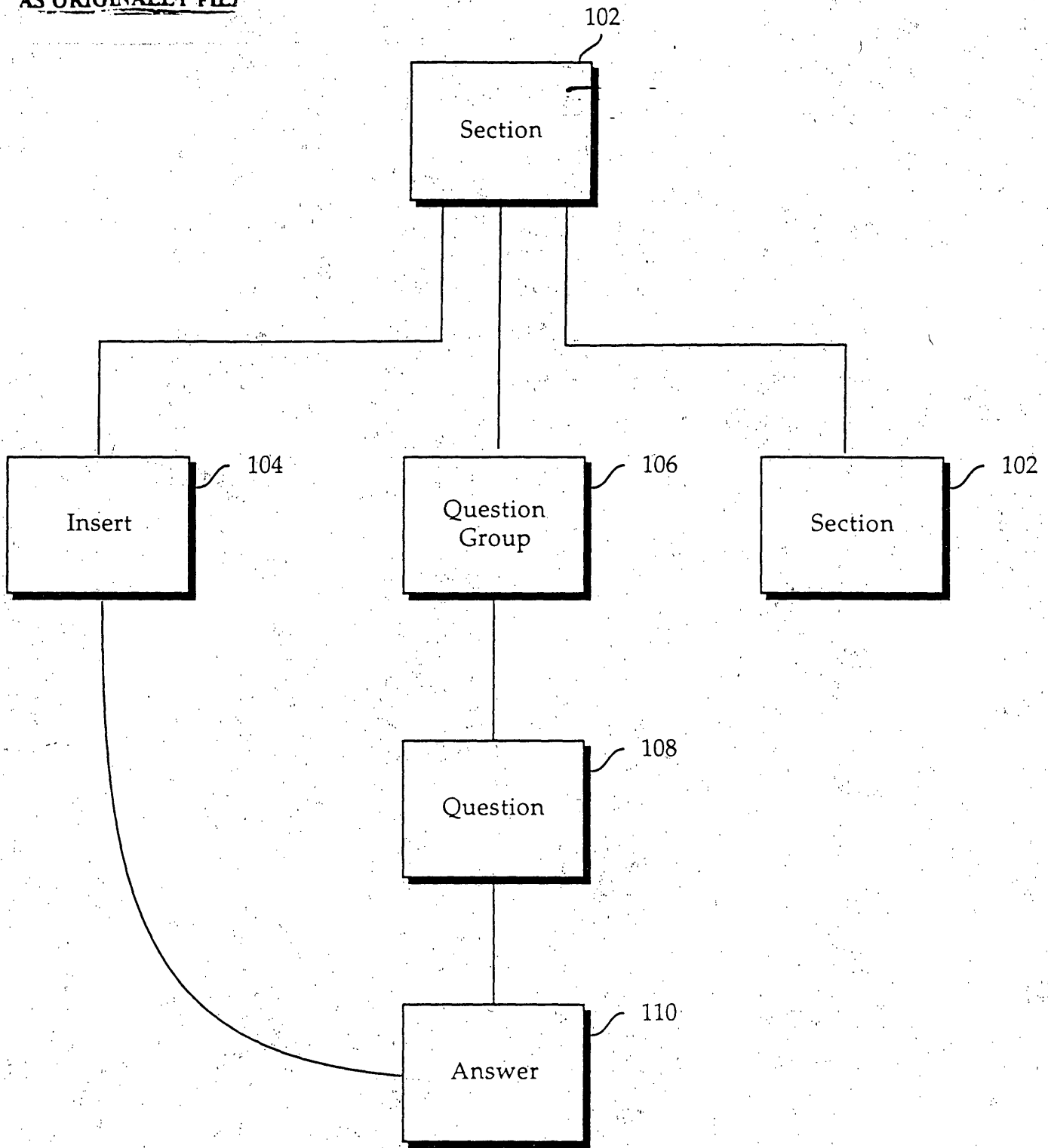


Figure 1C

102

Sections	
202	SectionID int
204	ParentID int
200	SectionName varchar(80)
	Sortorder int
206	Insertion tinyint
208	InsertType tinyint
	InsertGroupID int

130

SectionQ	
210	SectionQ id int
212	SectionID int
214	QGroup_id int
	Sonorder int

106

QGroup	
216	QGroup id int
202	Description varchar(255)
206	MultiEntry tinyint

160

108

Question	
218	QGroup_id int
220	QuestionID int
	Sortorder int
222	AnswerType int
204	AnswerFormat varchar(40)
224	KeywordGroupID int
226	TheQuestion varchar(255)
228	ObjectType int
230	DontReplicate tinyint
232	NoTextEntry tinyint

QBools

QuestionID	int
KeywordID	int
TrueFalse	tinyint

ChoiceGroup

240	ChoiceGroupID int
206	Label varchar(100)

ChoiceItem

242	ChoiceGroupID int
244	KeywordID int
246	TypeID int
	Not_KeywordID int

104

Insert	
248	Insert id int
250	SectionID int
208	TestimonyID int
	SectionName varchar(80)
	Sortorder int
278	InsertType tinyint
	InsertObjectID int

110

answer	
252	AnswerID int
254	QuestionID int
	SeriesID int
256	InsertID int
258	PersonID int
260	AnswerType int
262	ObjectType int
264	ObjectID int
	Label varchar(255)
288	testimonyid int
266	answertext varchar(255)
	TextLength int

120

Person	
268	PersonID int
288	TestimonyID int
	RelationID int
	First varchar(255)
	Middle varchar(255)
	Last varchar(255)
	DOB datetime
	Gender char(1)
	Interviewee tinyint
	Survivor tinyint
	RelationPlainText varchar(255)
	Notes varchar(255)
	DOBText varchar(255)
	NoteText text
	Title varchar(255)

126

Alias	
272	AliasID int
274	PersonID int
	AliasTypeID int
	First varchar(255)
	Middle varchar(255)
	Last varchar(255)
	Other varchar(255)
	AliasTypePlainText varchar(255)
	Title varchar(255)
	Notes text

124

Location	
276	LocationID int
288	TestimonyID int
	SpecificLocID int
	SpecificLocPlainText varchar(255)
	CityKWID int
	CityPlainText varchar(255)
	StateKWID int
	StatePlainText varchar(255)
	CountryKWID int
	CountryPlainText varchar(255)
	PostalCode varchar(20)
	NearCityKWID int
	NearCityPlainText varchar(255)
	PlaceNmKWID int
	PlaceNmPlainText varchar(255)
	LocationTypePlainText varchar(255)
	LocationType int
	StreetAddress varchar(255)

120

answertext	
290	answerid int
292	answertext text

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FIGURE 2

302

304
302

Sections...

- ▶ 1. Entry Details
- ▶ 2. Front Page
- ▶ 3. General Interview Detail
- ▶ 4. Interviewee Information
- ▶ 5. Prewar Life
 - ▶ Prewar Addresses
 - ▶ Household members (extended)
 - ▶ Organizational Affiliation
 - ▶ Activities & Interests
 - ▶ Attend synagogue or church
- ▶ 6. Wartime
- ▶ 7. Postwar
- ▶ 8. Family / People in This 1
- ▶ 9. Family Identity
- ▶ 10. Post-Interview Informa
- ▶ 11. Interviewer Information
- ▶ 12. Notes
- ▶ 13. Rescue and Aid Insert
- ▶ 14. War Crime Trials
- ▶ 15. Liberation Insert Sectio
- ▶ xxx Non-Catalogueable
- ▶ Unused Questions...

Currently Selected Question Group...

Attend synagogue or church

Answer Type	Question Text	Format	Keyword Group	Object Type	Don't Replicate
Boolean	Did your family attend a synagogue or church?	Yes, No			Don't Repl
Plain Text	If so, how often?				
Object	Name and Location of synagogue, church, et			Location	
Object	Name of synagogue or church leader?			Person	
Single Select	Position Title? (Rabbi, priest, reverand, et		Religious Leaders		

330 Add Section

332 Delete Section

Add Question Group 334

Delete Question Group 336

Collapse All

Export

Merge

Done

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FIGURE 3

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The image shows a software dialog box titled "ADD SECTION". The dialog box contains the following elements:

- Parent Section:** A dropdown menu with a downward arrow.
- Section Name:** A text input field.
- Insert Type:** A section containing a checkbox labeled "Insert" and two dotted-line dropdown menus. A handwritten "412" points to the checkbox.
- Buttons:** "Cancel" and "Save" buttons at the bottom.

Handwritten annotations on the right side of the dialog box:

- "402" points to the top border of the dialog box.
- "404" points to the "Parent Section" dropdown.
- "406" points to the "Section Name" text field.
- "408" points to the "Insert Type" section (checkbox and dropdowns).
- "410" points to the "Save" button.

FIGURE 4A

The image shows a dialog box titled "ADD QUESTION GROUP" with the following elements and handwritten annotations:

- 422**: Points to the top border of the dialog box.
- 424**: Points to the "Parent Section" dropdown menu.
- 426**: Points to the "Group Title" text input field.
- 430**: Points to the "Multi-Entry" checkbox.
- 428**: Points to the "Save" button.

The dialog box contains the following text and controls:

ADD QUESTION GROUP

Parent Section [dropdown menu]

Group Title [text input field]

Multi-Entry

Cancel Save

FIGURE 4B

Sections...

- ▶ 1. PIQ Entry Details
- ▶ 2. Front Page
- ▶ 3. General Interview Detail
- ▶ 4. Interviewee Information
- ▼ 5. Pre-war Life
 - Pre-war Addresses
 - Household members (extended)
 - Organizational Affiliation
 - Activities & Interests
 - Attend synagogue or church
- ▶ 6. Wartime
- ▶ 7. Postwar
- ▶ 8. Family / People in
- ▶ 9. Family Identity
- ▶ 10. Post-Interview
- ▶ 11. Interviewer Info
- ▶ 12. Notes
- ▶ 13. Rescue and Aid
- ▶ 14. War Crime Trials
- ▶ 15. Liberation Insert
- ▶ xxx Non-Catalogued
- ▶ Unused Questions...

Currently Selected Question Group...

Attend synagogue or church

Answer Type	Question Text	Format	Key word Group	Object Type	Don't Replicate
Boolean	Did your family attend a synagogue or church?	Yes/No			Don't Repl
Plain Text	If so, how often?				Don't Repl
Object	Name and Location of synagogue, church, etc.			PIQ_Location	
Object	Name of synagogue or church leader?			PIQ_Person	
Single Select	Position Title? (Rabbi, priest, reverend, etc.)		Religious Leaders		

Edit Question... Question Group: Attend synagogue or church

Question Text: Name of synagogue or church leader? Don't Replicate:

Answer Type:

- Plain Text
- Boolean
- Date
- Single Select
- Multi Select
- Object

Object: PIQ_Person

Relation Type: Religious Leaders (ML)

Buttons: Add Section, Delete Section, Coll, Done, Cancel, Save

Handwritten annotations: 510, 512, 514, 504, 506, 508, 516, 502

604 Drag from Keyword Authority to Admin Choices

606

608

610

612

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When a Keyword is dragged, the Keyword will be added to both "Admin Choices" and "User View".

When a Type is dragged, the Type is displayed in "Admin Choices" and the current keywords of that Type are added to "User View".

If an inappropriate keyword appears in "User View" from dragging a Type, it may be excluded by dragging it to the trash. This allows the user to create a list of exceptions to a desired Type.

Choice Groups	
ID	Choice Group
18	Alias Types
19	Alias Types - Mandatory
173	Arrived from? (ML)
247	Attributes and Roles
242	Camps (co, pow, intern)
164	Camps (ML)
163	Children (ML)
238	Circumstances of release
2	Cities, towns, villages, shtetls

User view:	
Item	Source
(P.O.) post-liberation con: camps	Type
Jasenovac (Yugoslavia : Camp)	Type
camps in Yugoslavia (CONTAINER ONL	Type
prisoner of war camps	Type
Stalag IV G, Oschatz (Germany : POW	Type
Kulmhof (Poland : Camp)	Type
Sobibor (Poland : Camp)	Type
Auschwitz II-Birkenau (Poland : Camp	Type
Treblinka II (Poland : Camp)	Type
Belzec II (Poland : Camp)	Type
SS mobile construction brigades	KW
concentration camps, Slovak	Type
Balf (Hungary : Camp)	Type
Csepel (Hungary : Camp)	Type
Hajduhadház (Hungary : Camp)	Type
Koeszeg (Hungary : Camp)	Type

Admin choices:	
Choice	Source
concentration camps	Type
NOT (z)Brauweiler (Germany : Camp	Type
NOT (z)Breitenau (1933-1934) (Ger	Type
NOT (z)Breslau-Dürrgoy (Germany : Type	Type
NOT (z)Bürgermoor (Germany : Camp	Type
NOT (z)Chemnitz (Germany : Camp)	Type
NOT (z)Colditz (1933-1934) (Germ:	Type
NOT (z)Columbia-Haus (Germany : C:	Type
NOT (z)Dresden-Trachenberge (Gerr	Type
NOT (z)Gollnow (Germany : Camp)	Type
NOT (z)Hammerstein (Germany : Can	Type
NOT (z)Heuberg (Germany : Camp)	Type
NOT (z)Hohnstein (Germany : Camp)	Type
NOT (z)Langlütjen (Germany : Camp)	Type
NOT (z)Lichtenburg (Germany : Camp	Type
NOT (z)Ochtumsand (Germany : Camp	Type

Keyword Authority			
KW Hierarchy	Find	Again	Reset
Keyword	Type		
> academic life (CONTAINER ON	Miscellaneous		
> cultural and social life (CON	cultural and so		
> discrimination and intoleranc	Miscellaneous		
> economic life (CONTAINER ON	Miscellaneous		
> family life	family life		
> food and eating (CONTAINER C	Food and Drink		
> forced labor experience (CON	Miscellaneous		
> government and political life	Miscellaneous		
> health and health services (C	Miscellaneous		
> hiding	hiding		
> incarceration (CONTAINER OI	Miscellaneous		
> Jewish life (CONTAINER ONL	Miscellaneous		

Cancel Save

FIGURE 6

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TestimonyIntCode : 232
Interviewee : Sigi Har

Add PIQPerson Object
5. Prewar Life: Name of synagogue or church leader? (PIQPerson.)

Relation to Interviewee: *704*

First:

Middle: *706*

Last:

Title:

Date of Birth:

Gender: Male Female Unspecified

Survivor: Yes No Unspecified *708*

Notes About This Person:

Instructions: 1) Double-click to start data entry. 2) 'Alias Type' is REQUIRED to save an Alias record.

Alias-Type	First	Middle	Last	Title
release name				
release maiden name				
current name				
name at birth				
last name during war				
Hebrew name				
Yiddish name				
maiden name				
nickname				

710

Paste Name ← Highlight a line, then Use this button to paste the PIQ Person's name on the line.

Cancel OK

FIGURE 7

Testimony IntCode : 232
Interviewee : Sigi Hart

Spreadsheet... OK

Sections Collapse All Selected Question Group

Name of Interviewee

Question Answer

Edit Alias to PIQPerson...

5. General Interview Details: Release Name of interviewee (as appears on Release Form.) (PIQAlias)

Alias for: Sigi Hart ~802

First: Sigi ~806

Middle:

Last: Hart ~808

Title:

Alias Type: release name ~810

Notes About This Alias

NOTE: 'Alias Type' is REQUIRED in order to save the record.

Paste Name Cancel OK

PIQPerson friends, Simon, [Diamond], , Mr. [Vogel], Michelle, [Vulkan], Freidel, Begleiter, , Begleiter, , Begleiter, Adela, Begleiter, Baruch, Begleiter, Isak,

PIQPerson sisters-in-law

PIQPerson aunts

PIQPerson grandfathers

PIQPerson grandmothers

PIQPerson aunts

PIQPerson uncles

PIQPerson uncles

Keywords

PIQ Choices

Keyword:

Aleksander Rebbes

Baal Koreh

Baal Tefilla

Belzer Rebbes

cantors

Hager, Rabbi Menahem Mendel Ben Hayyim

Halberstam, Rabbi Yekutiel Judah

Lubavitcher Rebbes

minister

occupations, gabbairn

Plain Text Answer

PRINT OF DRAWINGS AS ORIGINALLY FILED

FIGURE 8

PRINT OF DRAWINGS
AS ORIGINALLY FILED

Testimony IntCode : 232
 Interviewee: SimHaet

Edit Location Object

5. Prewar Life: Name and Location of synagogue, church, etc. (PIQLocation)

Type of Location: ~902

Enter Plain Text ~910 Click to select, ~912
 Cmd=F to Search ~910 Drag a Keyword ~912

Place Name (Camp, School, Ghetto, etc.):

Street Address:

City/Town/Village/Shtetle: 914

Nearest Large City:

State/Province:

Country:

Postal Code:

Specific Location: 908

Keywords...

PIQ Choices

Keyword:

Click a box to fill in this list. Then drag a keyword.

Proposed Keywords

Proposed keyword	Comments

Paste Location Cancel OK

(ML) A0(A04z#select-label, comments, ppkwid, pkw

FIGURE 9

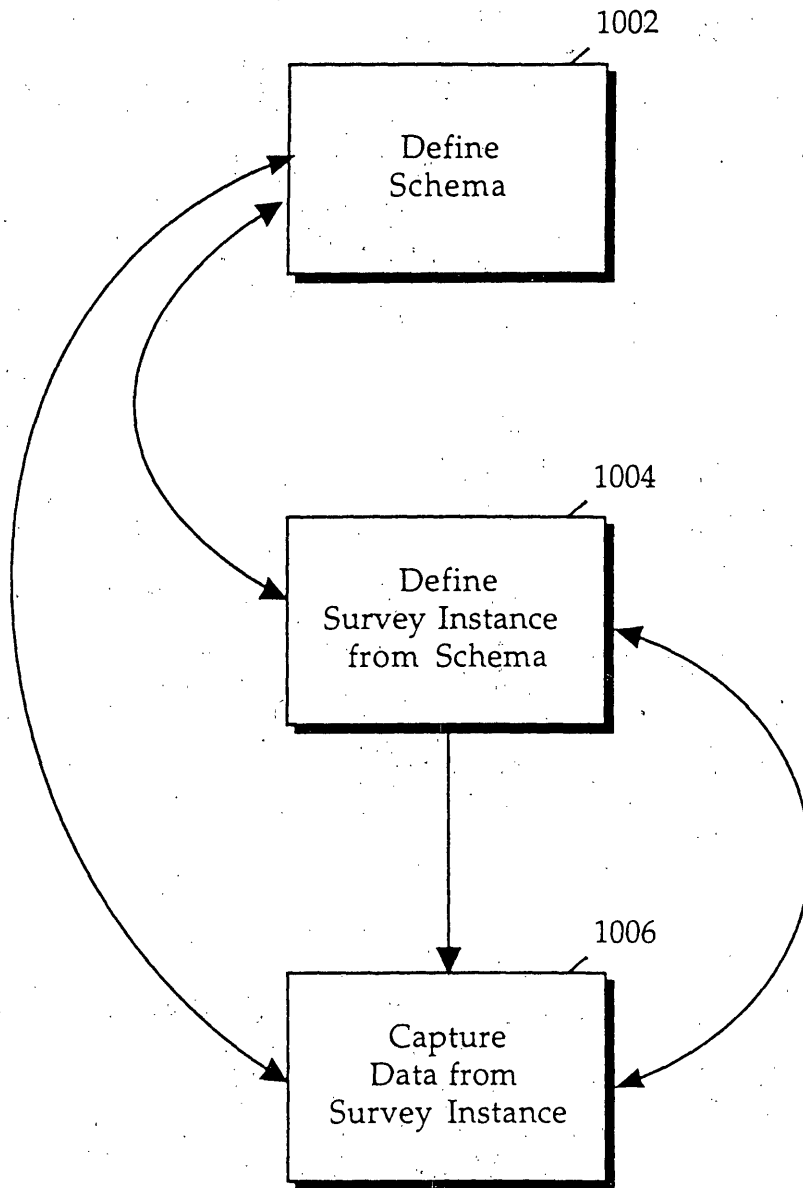


Figure 10

Testimony IntCode : 232
Interviewee : Sigi Hart

Spreadsheet... OK

Sections Collapse All Selected Question Group

Attend synagogue or church 1116 1118 1120

Question	Answer 1
Did your family attend a synagogue or church prior to the war? (Yes, No)	Yes ~ 1130A
If so, how often? (Plain Text)	~ 1130B Friday and Saturday every week
Name and Location of synagogue, church, etc. (PIQLocation)	Place Nm: Heidereyer Shul / Berlin (Germany) / Germany / Heidereyer Gasse
Name of synagogue or church leader? (PIQPerson)	~ 1130C ~ 1130D

Keyword Answer Plain Text Answer

1128 1124

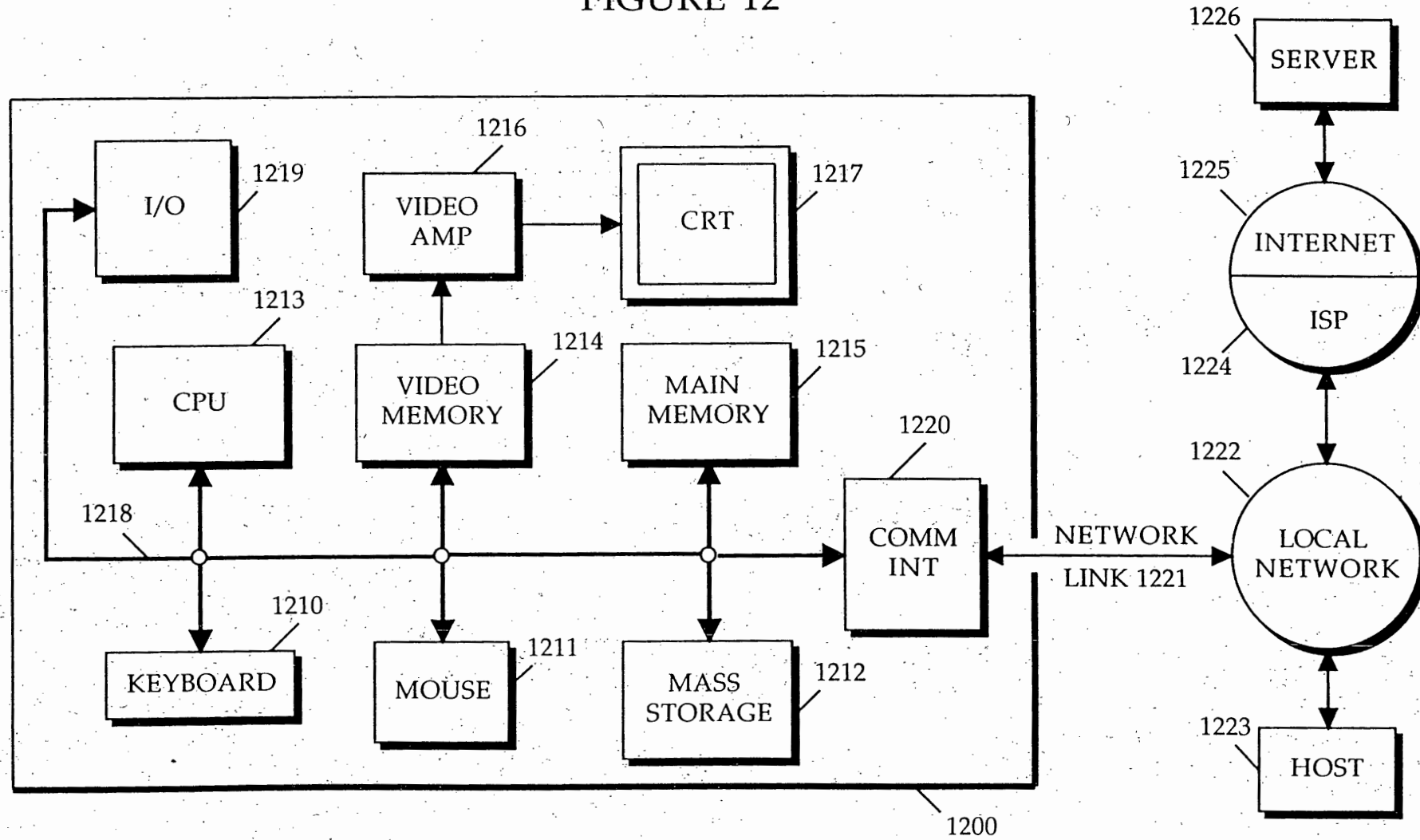
PIQ Persons

Type	Relationship	Name
PIQPerson	friends	, Simon,
PIQPerson	friends	[Diamond], , Mr.
PIQPerson	sisters-in-law	[Vogel], Michelle,
PIQPerson	aunts	[Vulkan], Freidel,
PIQPerson	grandfathers	Begleiter, ,
PIQPerson	grandmothers	Begleiter, ,
PIQPerson	aunts	Begleiter, Adela,
PIQPerson	uncles	Begleiter, Baruch,
PIQPerson	uncles	Begleiter, Isak,

1106 1108 1110 1112 1104 1122

1126
FIGURE 11

FIGURE 12



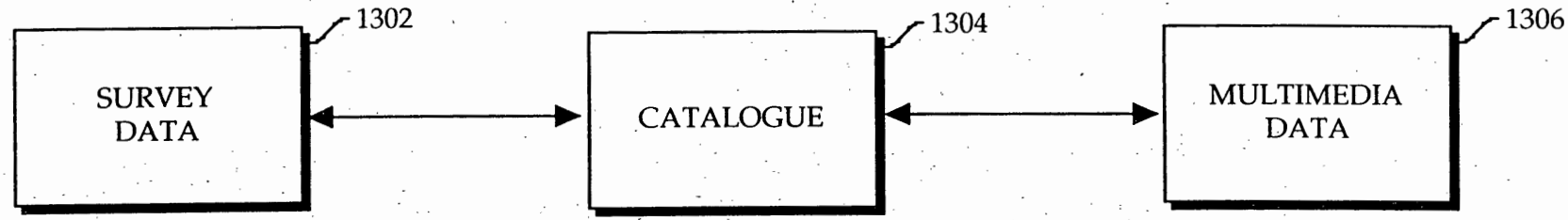


Figure 13

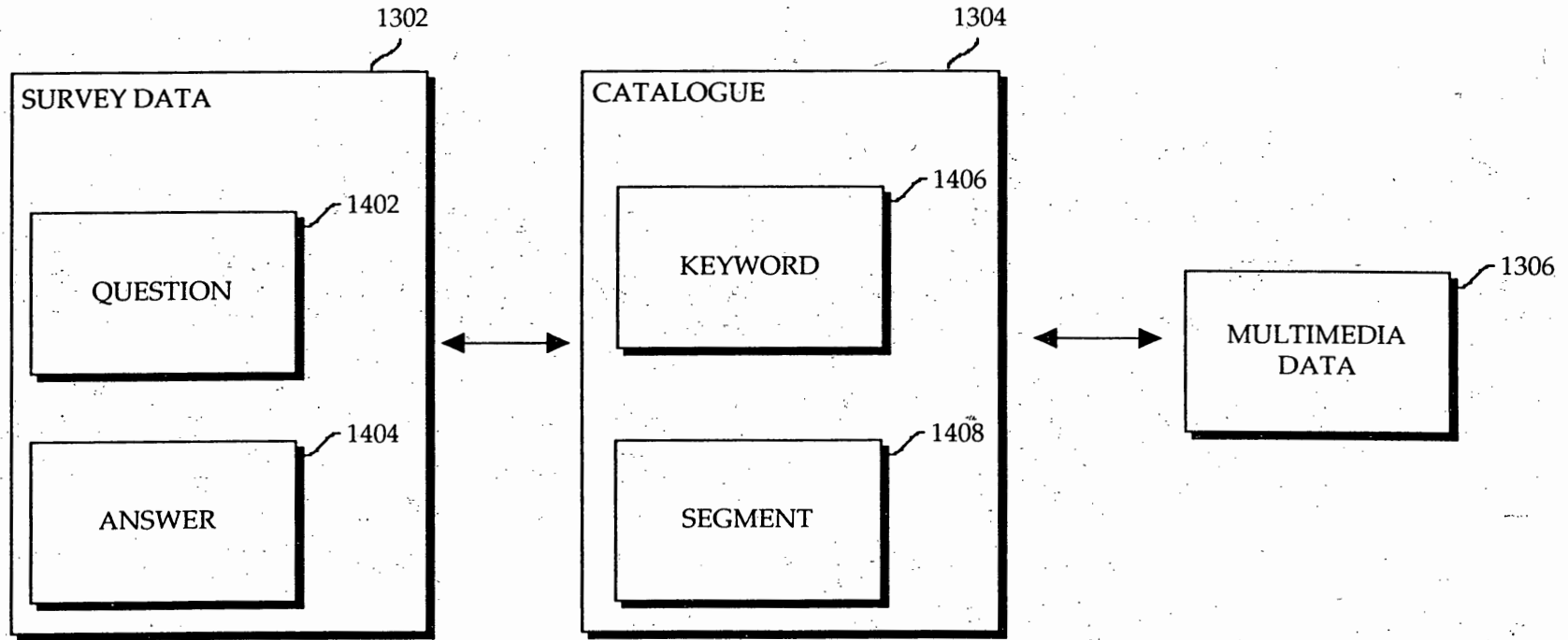
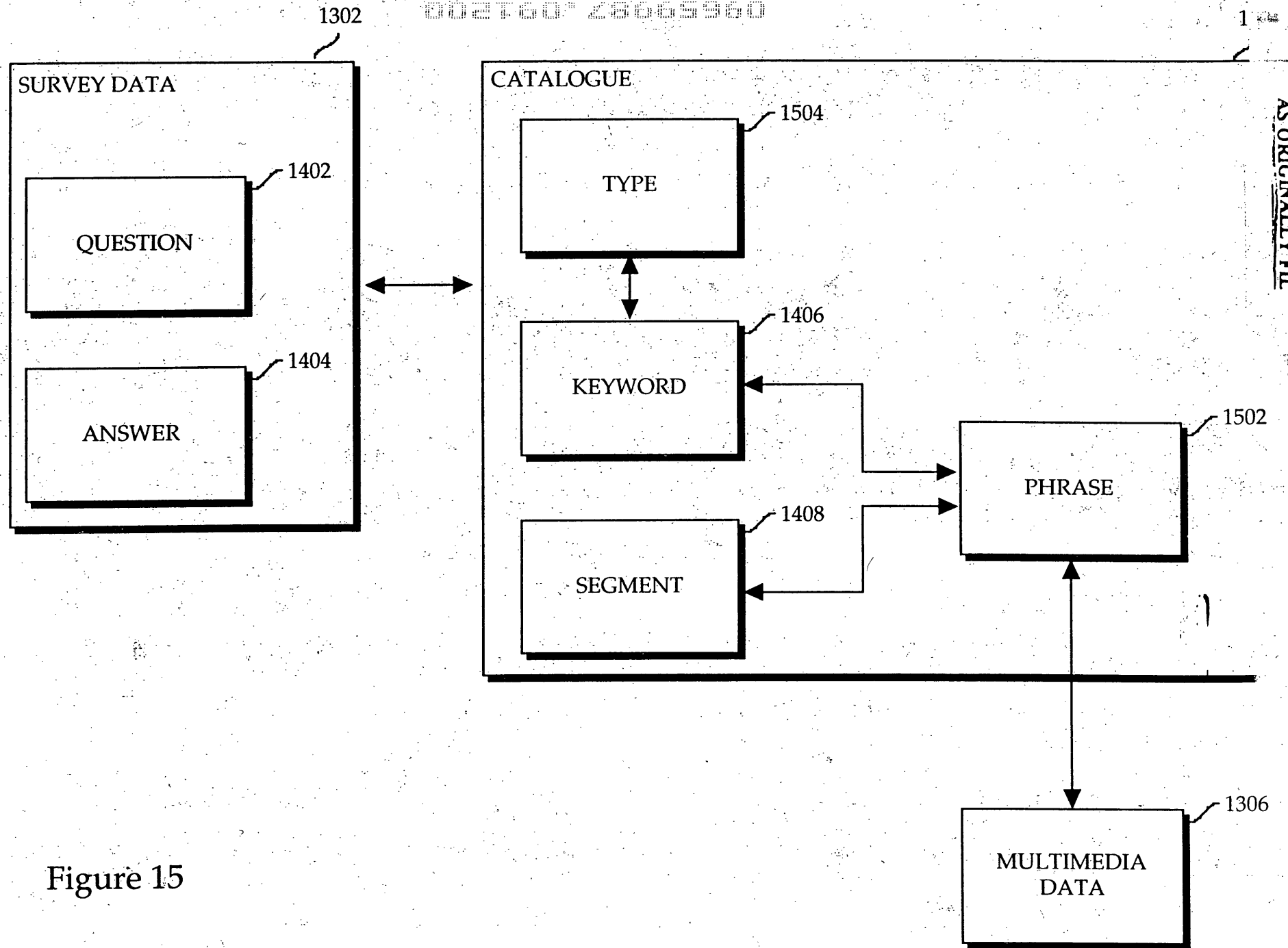


Figure 14



PRINT OF DRAWINGS
AS ORIGINALLY FILED

Figure 15

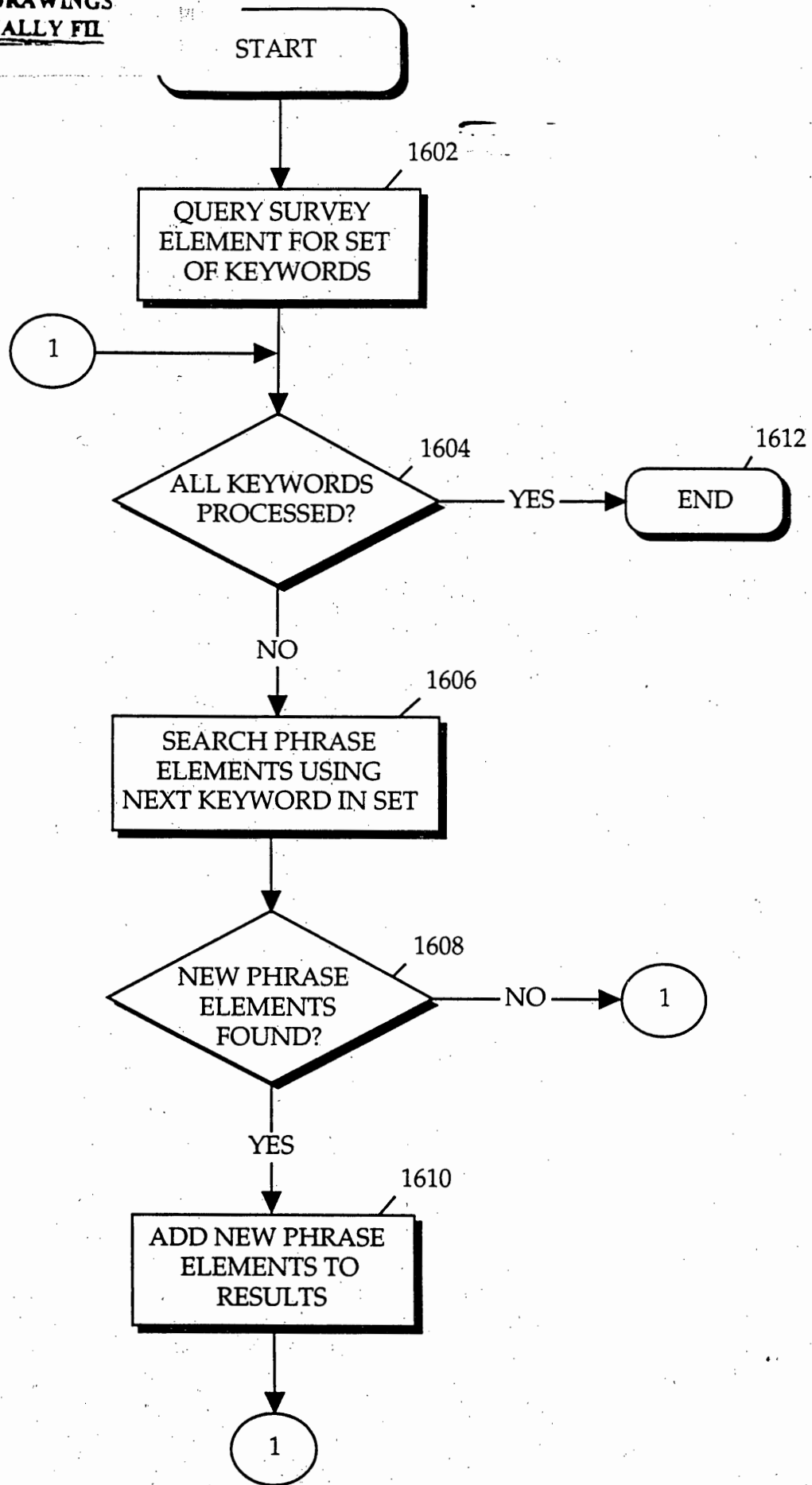


Figure 16

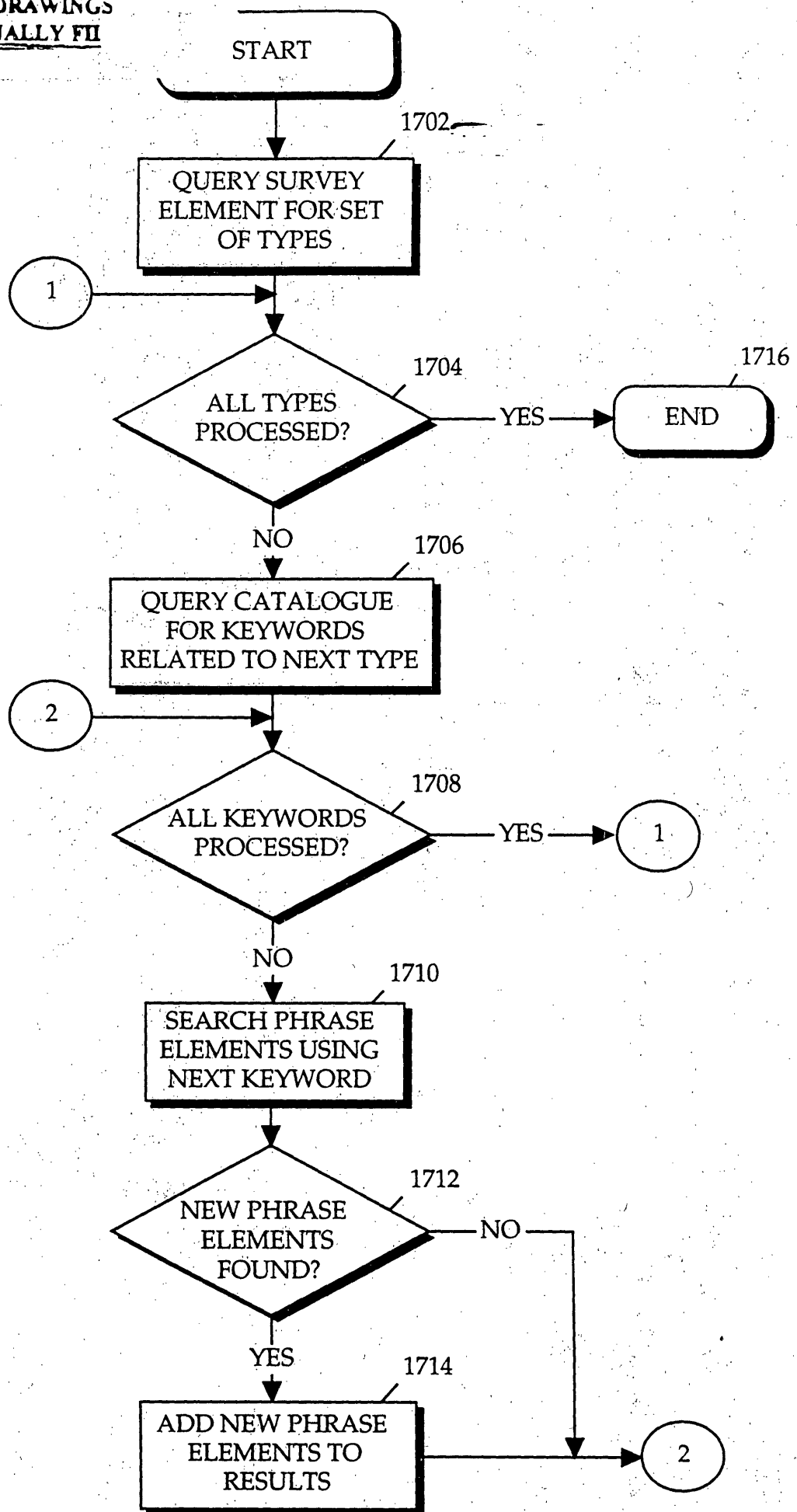


Figure 17

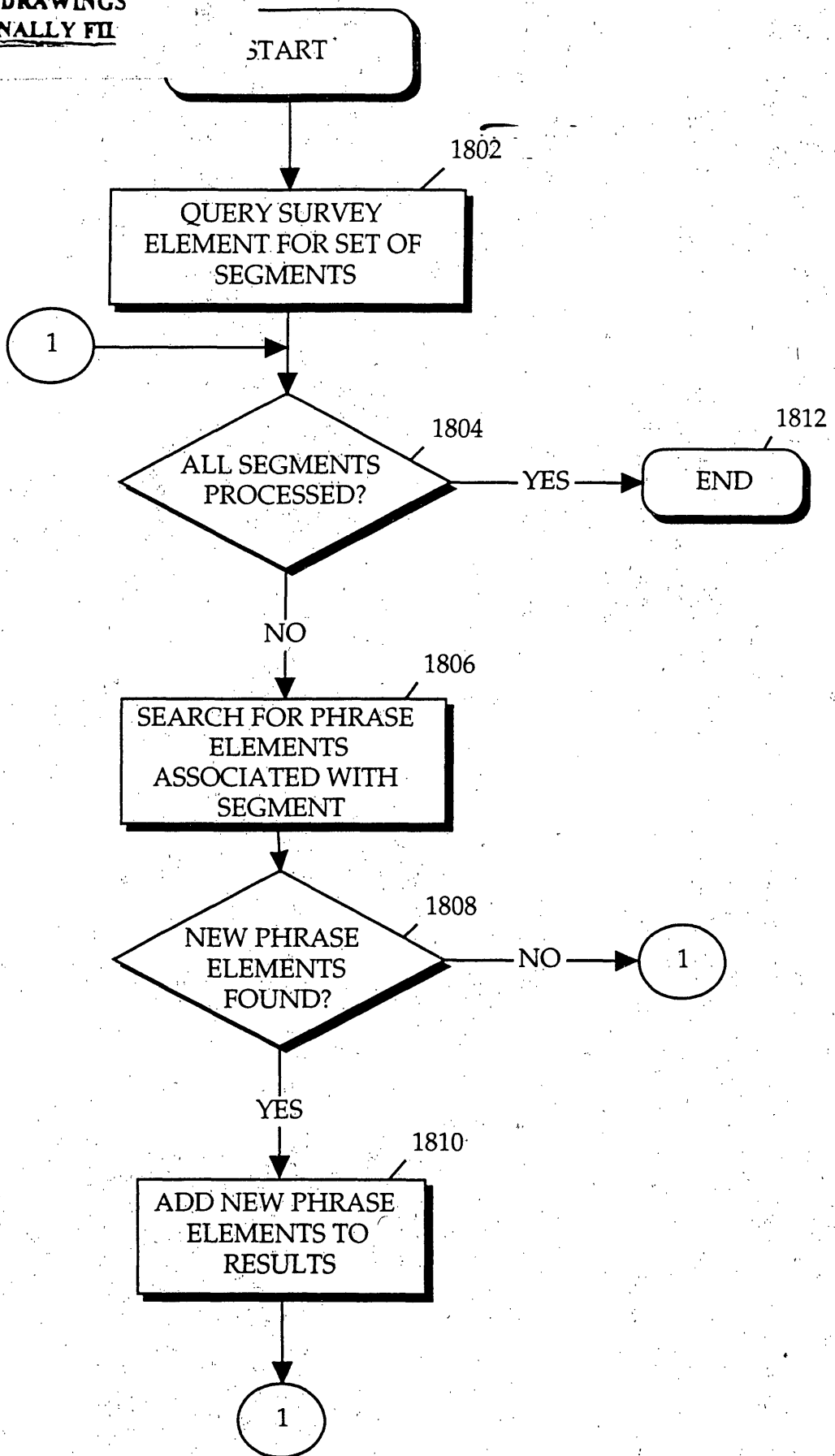


Figure 18

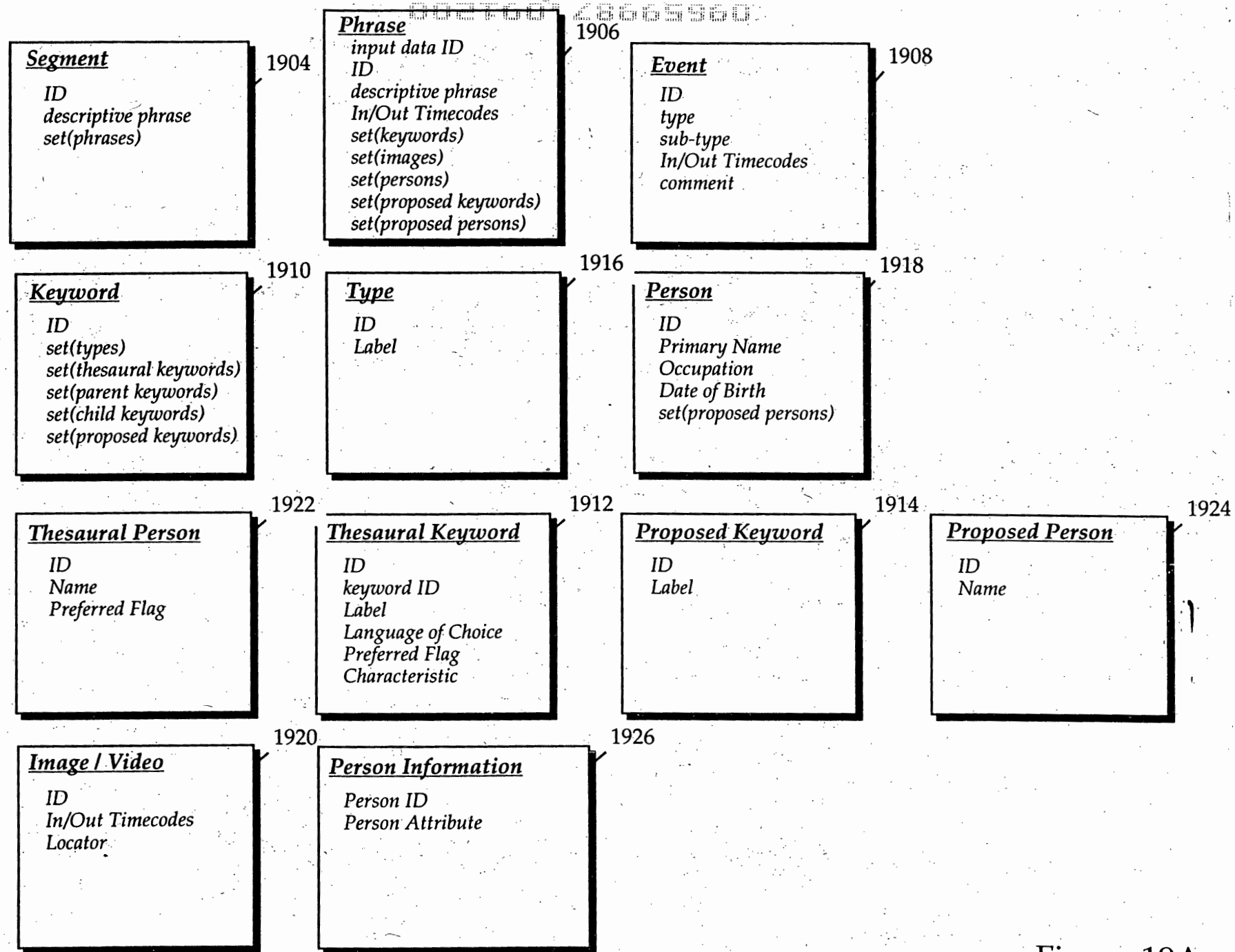


Figure 19A

PRINT OF DRAWINGS
AS ORIGINALLY FILED

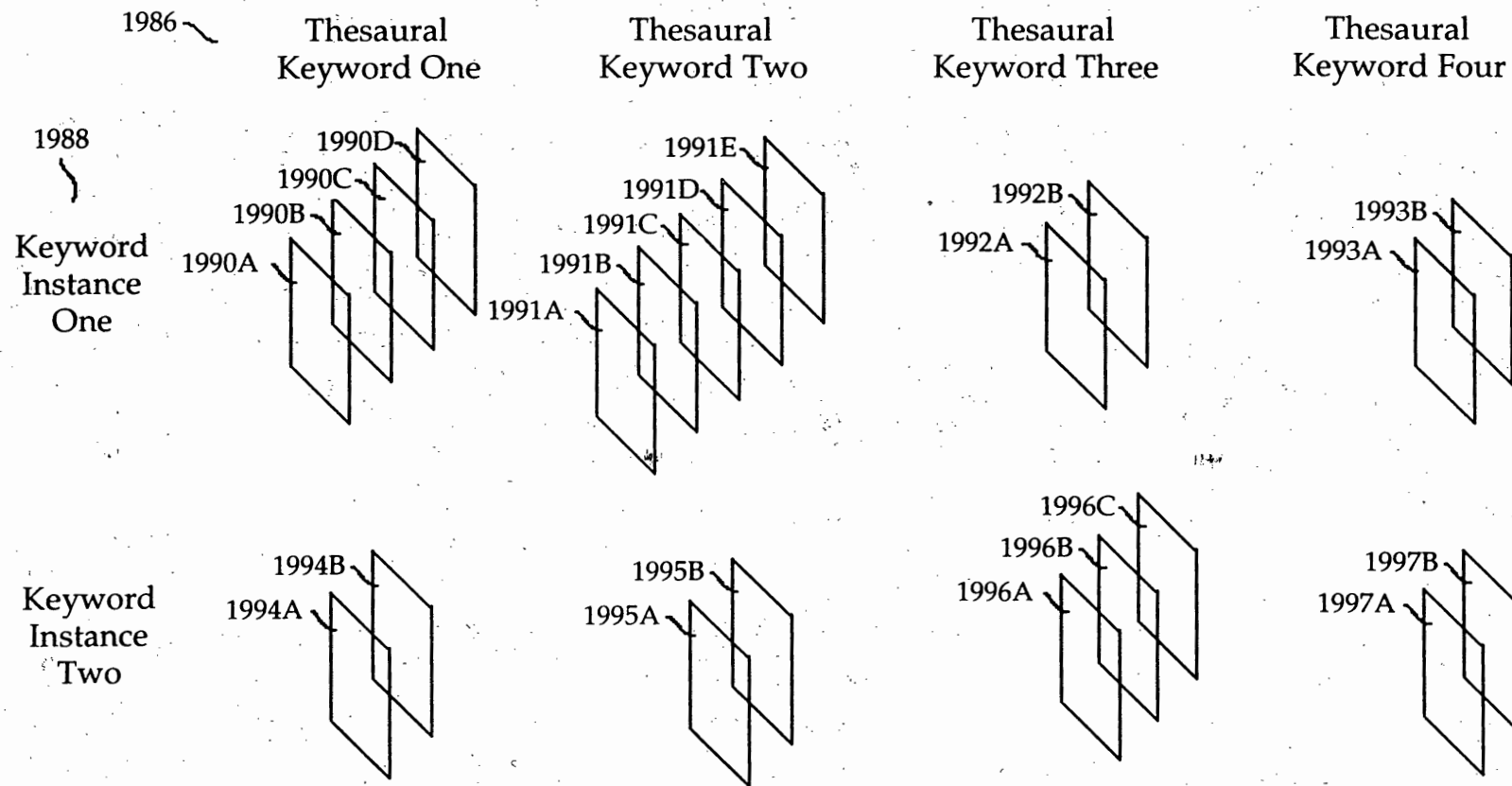


Figure 19C

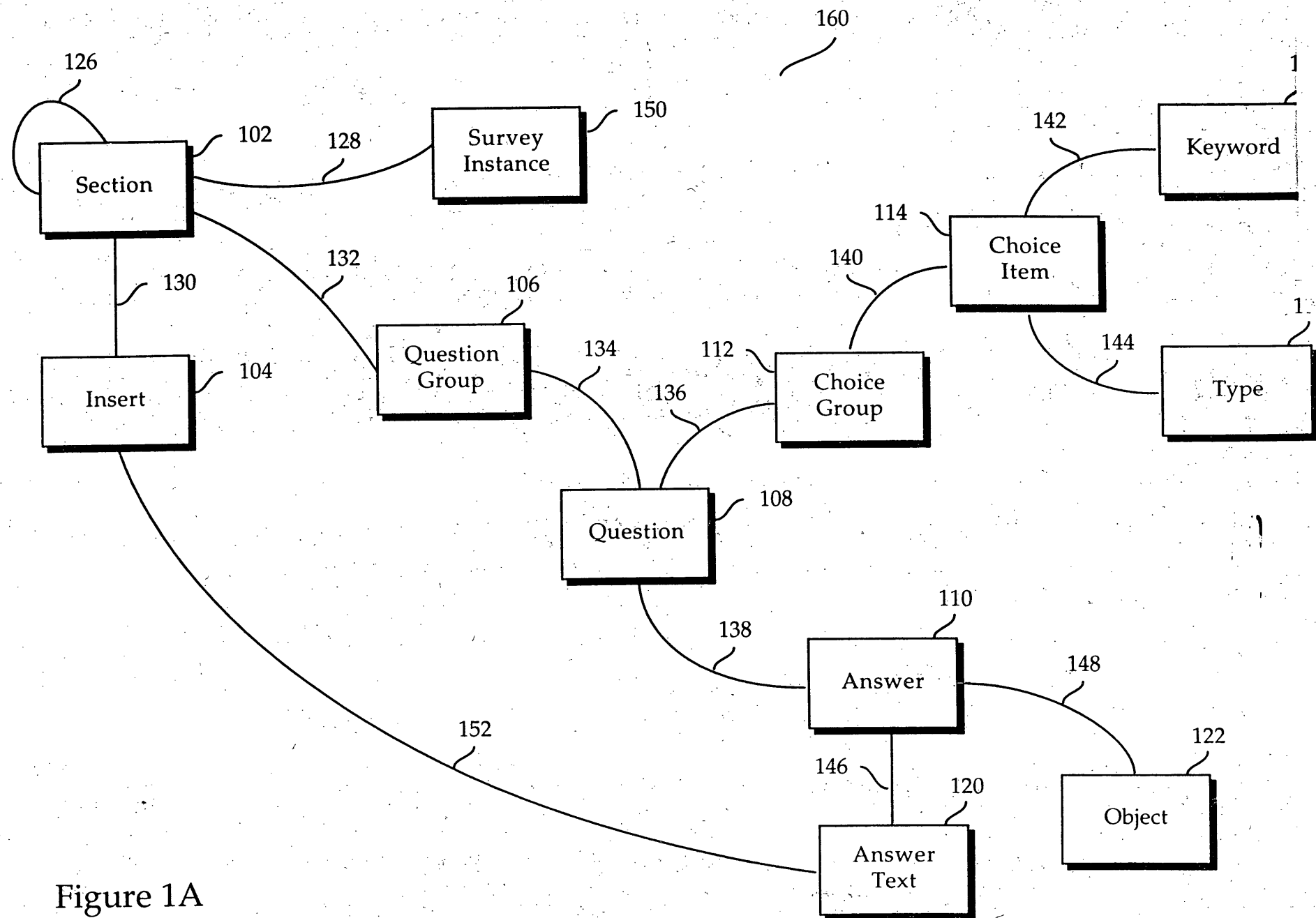


Figure 1A

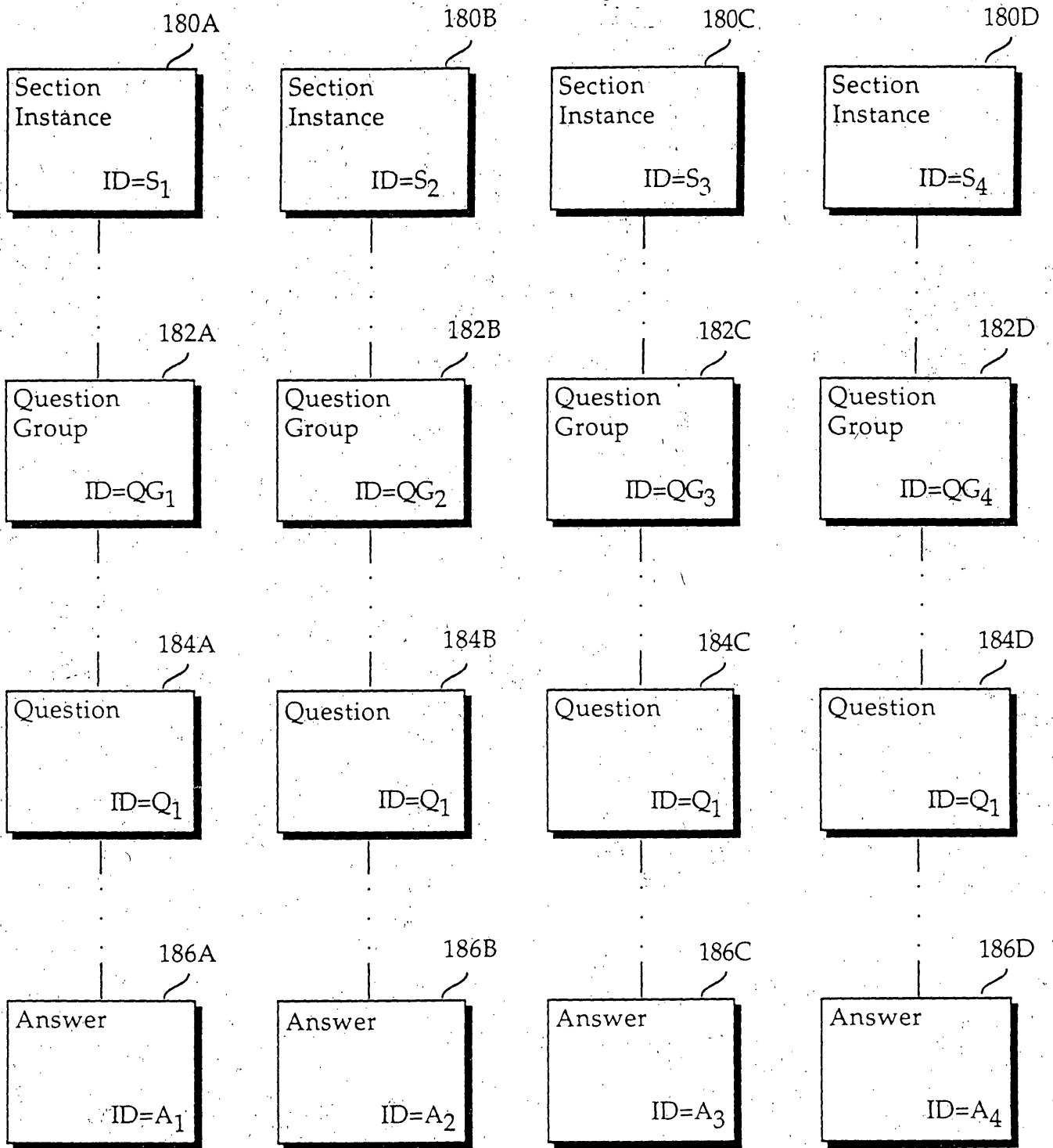


Figure 1B

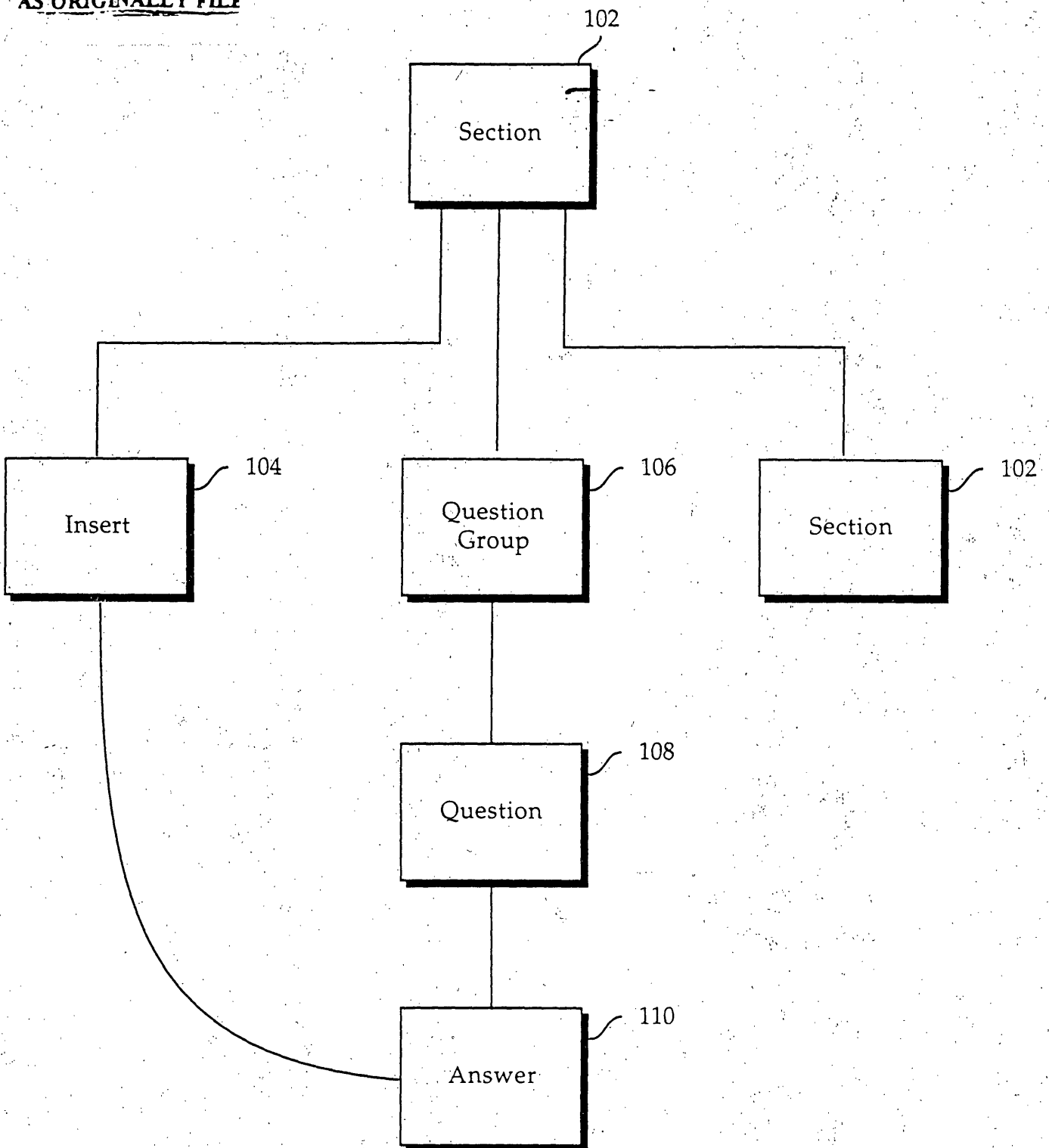


Figure 1C

102

Sections	
202	SectionID int
204	ParentID int
200	SectionName varchar(80)
	Sortorder int
206	Insertion tinyint
208	InsertType tinyint
	InsertGroupID int

130

SectionQ	
210	SectionQ_id int
212	SectionID int
214	QGroup_id int
	Sonorder int

106

QGroup	
216	QGroup_id int
202	Description varchar(255)
206	MultiEntry tinyint

108

Question	
218	QGroup_id int
220	QuestionID int
	Sortorder int
222	AnswerType int
20A	AnswerFormat varchar(40)
224	KeywordGroupID int
226	theQuestion varchar(255)
228	ObjectType int
230	DontReplicate tinyint
232	NoTextEntry tinyint

QBools	
	QuestionID int
	KeywordID int
	TrueFalse tinyint

ChoiceGroup	
240	ChoiceGroupID int
286	Label varchar(100)

ChoiceItem	
242	ChoiceGroupID int
244	KeywordID int
246	TypeID int
	Not_KeywordID int

104

Insert	
248	Insert_id int
250	SectionID int
208	TestimonyID int
	SectionName varchar(80)
	Sortorder int
278	InsertType tinyint
	InsertObjectID int

110

answer	
252	AnswerID int
254	QuestionID int
	SeriesID int
256	InsertID int
258	PersonID int
260	AnswerType int
262	ObjectType int
26A	ObjectID int
	Label varchar(255)
288	testimonyid int
266	answertext varchar(255)
	TextLength int

120

Person	
268	PersonID int
288	TestimonyID int
	RelationID int
	First varchar(255)
	Middle varchar(255)
	Last varchar(255)
	DOB datetime
	Gender char(1)
	Interviewee tinyint
	Survivor tinyint
	RelationPlainText varchar(255)
	Notes varchar(255)
	DOBText varchar(255)
	NoteText text
	Title varchar(255)

126

Alias	
272	AliasID int
274	PersonID int
	RelationID int
	First varchar(255)
	Middle varchar(255)
	Last varchar(255)
	Other varchar(255)
	AliasTypePlainText varchar(255)
	Title varchar(255)
	Notes text

124

Location	
276	LocationID int
288	TestimonyID int
	SpecificLocID int
	SpecIFICLocPlainText varchar(255)
	CityKWID int
	CityPlainText varchar(255)
	StateKWID int
	StatePlainText varchar(255)
	CountryKWID int
	CountryPlainText varchar(255)
	PostalCode varchar(20)
	NearCityKWID int
	NearCityPlainText varchar(255)
	PlaceNmKWID int
	PlaceNmPlainText varchar(255)
	LocationTypePlainText varchar(255)
	LocationType int
	StreetAddress varchar(255)

PRINT OF DRAWINGS
AS ORIGINALLY FILED

302

304

Sections...

- ▶ 1. Entry Details
- ▶ 2. Front Page
- ▶ 3. General Interview Detail
- ▶ 4. Interviewee Information
- ▶ 5. Prewar Life
 - ▶ Prewar Addresses
 - ▶ Household members (extended)
 - ▶ Organizational Affiliation
 - ▶ Activities & Interests
 - ▶ Attend synagogue or church
- ▶ 6. Wartime
- ▶ 7. Postwar
- ▶ 8. Family / People in This
- ▶ 9. Family Identity
- ▶ 10. Post-Interview Informa
- ▶ 11. Interviewer Information
- ▶ 12. Notes
- ▶ 13. Rescue and Aid Insert
- ▶ 14. War Crime Trials
- ▶ 15. Liberation Insert Sectio
- ▶ xxx Non-Catalogueable
- ▶ Unused Questions...

302

Currently Selected Question Group...

Attend synagogue or church

318 320 322 324 326 328

Answer Type	Question Text	Format	Keyword Group	Object Type	Don't Replicate
Boolean	Did your family attend a synagogue or church?	Yes, No			Don't Repl
Plain Text	If so, how often?				
Object	Name and Location of synagogue, church, et			Location	
Object	Name of synagogue or church leader?			Person	
Single Select	Position Title? (Rabbi, priest, reverand, et		Religious Leaders		

330

332

334

336

Done

Export

Merge

Collapse All

FIGURE 3

The image shows a software dialog box titled "ADD SECTION". It contains the following elements:

- Parent Section:** A dropdown menu with a downward arrow.
- Section Name:** A text input field.
- Insert:** A checkbox with the label "Insert".
- Insert Type:** Two stacked dropdown menus with downward arrows.
- Buttons:** "Cancel" and "Save" buttons at the bottom.

Handwritten annotations include:

- "402" pointing to the top border of the dialog box.
- "404" pointing to the "Parent Section" dropdown.
- "406" pointing to the "Section Name" text field.
- "412" pointing to the "Insert" checkbox.
- "408" pointing to the "Insert Type" dropdowns.
- "410" pointing to the "Save" button.

FIGURE 4A

422

424

426

428

430

The image shows a screenshot of a software dialog box titled "ADD QUESTION GROUP". The dialog box has a title bar at the top. Below the title bar, there are three input fields: a dropdown menu labeled "Parent Section", a text input field labeled "Group Title", and a checkbox labeled "Multi-Entry". At the bottom of the dialog box, there are two buttons: "Cancel" and "Save". Handwritten annotations in black ink are present: "422" points to the title bar, "424" points to the "Parent Section" dropdown, "426" points to the "Group Title" text field, "428" points to the "Save" button, and "430" points to the "Multi-Entry" checkbox.

FIGURE 4B

Sections...

- 1. PIQ Entry Details
- 2. Front Page
- 3. General Interview Detail
- 4. Interviewee Information
- 5. Prewar Life
 - Prewar Addresses
 - Household members (extended)
 - Organizational Affiliation
 - Activities & Interests
 - Attend Synagogue or church
- 6. Wartime
- 7. Postwar
- 8. Family / People in
- 9. Family Identity
- 10. Post-Interview
- 11. Interviewer Info
- 12. Notes
- 13. Rescue and Aid
- 14. War Crime Trials
- 15. Liberation Inter
- xxx Non-Catalogued
- Unused Questions...

Currently Selected Question Group...

Attend synagogue or church

Answer Type	Question Text	Format	Keyword Group	Object Type	Don't Replicate
Boolean	Did your family attend a synagogue or church?	Yes;No			Don't Repl
Plain Text	If so, how often?			PIQ_Location	
Object	Name and Location of synagogue, church, etc.			PIQ_Person	
Object	Name of synagogue or church leader?				
Single Select	Position Title? (Rabbi, priest, reverend, etc.)		Religious Leaders		

Edit Question... Question Group: Attend synagogue or church

Question Text: Name of synagogue or church leader? Don't Replicate:

Answer Type:

- Plain Text
- Boolean
- Date
- Single Select
- Multi Select
- Object

Relation Type: Religious Leaders (ML)

Buttons: Add Section, Delete Section, Coll, Done, Cancel, Save

Handwritten annotations: 516, 502, 504, 506, 510, 512, 514

FIGURE 5

Choice Groups

ID	Choice Group
18	Alias Types
19	Alias Types - Mandatory
173	Arrived from? (ML)
247	Attributes and Roles
242	Camps (co, POW, intern)
164	Camps (ML)
163	Children (ML)
238	Circumstances of release
2	Cities, towns, villages, shetels

604 Drag from Keyword Authority to Admin Choices

When a Keyword is dragged, the Key word will be added to both "Admin Choices" and "User View".

When a Type is dragged, the Type is displayed in "Admin Choices" and the current keywords of that Type are added to "User View".

If an inappropriate key word appears in "User View" from dragging a Type, it may be excluded by dragging it to the trash. This allows the user to create a list of exceptions to a desired Type.

608

Item	Source
(P)O post-liberation con: camps	Type
Jasenovac (Yugoslavia : Camp)	Type
camps in Yugoslavia (CONTAINER ONL	Type
prisoner of war camps	Type
Stalag IV G, Oschatz (Germany : POW	Type
Kulmhof (Poland : Camp)	Type
Sobibor (Poland : Camp)	Type
Auschwitz II-Birkenau (Poland : Camp)	Type
Treblinka II (Poland : Camp)	Type
Belzec II (Poland : Camp)	Type
SS mobile construction brigades	KW
concentration camps, Slovak	Type
Balf (Hungary : Camp)	Type
Csepel (Hungary : Camp)	Type
Hajduhadhaz (Hungary : Camp)	Type
Koeszeg (Hungary : Camp)	Type

608

Choice	Source
concentration camps	Type
NOT (z)Brauweiler (Germany : Camp	Type
NOT (z)Breitenau (1933-1934) (Ger	Type
NOT (z)Breslau-Dürrgoy (Germany : Type	Type
NOT (z)Bürgermoor (Germany : Camp	Type
NOT (z)Chemnitz (Germany : Camp)	Type
NOT (z)Colditz (1933-1934) (Germa	Type
NOT (z)Columbia-Haus (Germany : C	Type
NOT (z)Dresden-Trachenberge (Gerr	Type
NOT (z)Göllnow (Germany : Camp)	Type
NOT (z)Hammerstein (Germany : Can	Type
NOT (z)Heuberg (Germany : Camp)	Type
NOT (z)Hohnstein (Germany : Camp)	Type
NOT (z)Langlütjen (Germany : Camp)	Type
NOT (z)Lichtenburg (Germany : Camp	Type
NOT (z)Ochtumsand (Germany : Camp	Type

604

604

Keyword	Type
> academic life (CONTAINER ON	Miscellaneous
> cultural and social life (CON	cultural and s
> discrimination and intolerant	Miscellaneous
> economic life (CONTAINER ON	Miscellaneous
> family life	family life
> food and eating (CONTAINER C	Food and Drin
> forced labor experience (CON	Miscellaneous
> government and political life	Miscellaneous
> health and health services (C	Miscellaneous
> hiding	hiding
> incarceration (CONTAINER ON	Miscellaneous
> Jewish life (CONTAINER ONL	Miscellaneous

606

608

608

Cancel Save

FIGURE 6

TestimonyIntCode : 232
Interviewee : Sigi Har

Add PIQPerson Object
5. Prewar Life: Name of synagogue or church leader? (PIQPerson.)

Relation to Interviewee: *704*

First:

Middle: *706*

Last:

Title:

Date of Birth:

Gender: Male Female Unspecified *708*

Survivor: Yes No Unspecified

Notes About This Person:

Instructions: 1) Double-click to start data entry. 2) 'Alias Type' is REQUIRED to save an Alias record.

Alias Type	First	Middle	Last	Title
release name				
release maiden name				
current name				
name at birth	<i>710</i>			
last name during war				
Hebrew name				
Yiddish name				
maiden name				
nickname				

Paste Name <- Highlight a line, then use this button to paste the PIQ Person's name on the line.

FIGURE 7

Testimony IntCode : 232
Interviewee : Sigi Hart

Spreadsheet... OK

Sections Collapse All Selected Question Group

Name of Interviewee

Question Answer

Edit Alias to PIQ Person...

3. General Interview Details: Release Name of interviewee (as appears on Release Form.) (PIQ Alias.)

Alias for: Sigi Hart

First: Sigi

Middle:

Last: Hart

Title:

Alias Type: release name

Notes About This Alias

NOTE: 'Alias Type' is REQUIRED in order to save the record.

Paste Name Cancel OK

PIQ Person friends, Simon,
PIQ Person friends-in-law [Diamond], Mr.
PIQ Person aunts [Vogel], Michelle,
PIQ Person grandfathers [Vulkan], Freidel,
PIQ Person grandmothers Begleiter, ,
PIQ Person aunts Begleiter, ,
PIQ Person uncles Begleiter, Adela,
PIQ Person uncles Begleiter, Baruch,
PIQ Person uncles Begleiter, Isak,

Keywords

PIQ Choices

Keyword

Aleksander Rebbes
Baal Koreh
Baal Tefilla
Belzer Rebbes
cantors
Hager, Rabbi Menahem Mendel Ben Hayyim
Halberstam, Rabbi Yekutiel Judah
Lubavitcher Rebbes
minister
occupations, gabbaim

FIGURE 8

TestimonyIntCode: 232
Interviewee: Sisi Huet

Edit Location Object
5. Prewar Life: Name and Location of synagogue, church, etc. (PIQLocation.)

Type of Location: *~906*

Place Name (Camp, School, Ghetto, etc.): *910*

Street Address:

City/Town/Village/Shtetle: *914*

Nearest Large City:

State/Province:

Country:

Postal Code:

Specific Location: *908*

Keywords...
PIQ Choices
Keyword:
Click a box to fill in this list. Then drag a keyword.

Proposed Keywords

Proposed Keyword	Comments
Germany	

Paste Location

(ML)AD(A04zselect label, comments, ppkwid, pkw)

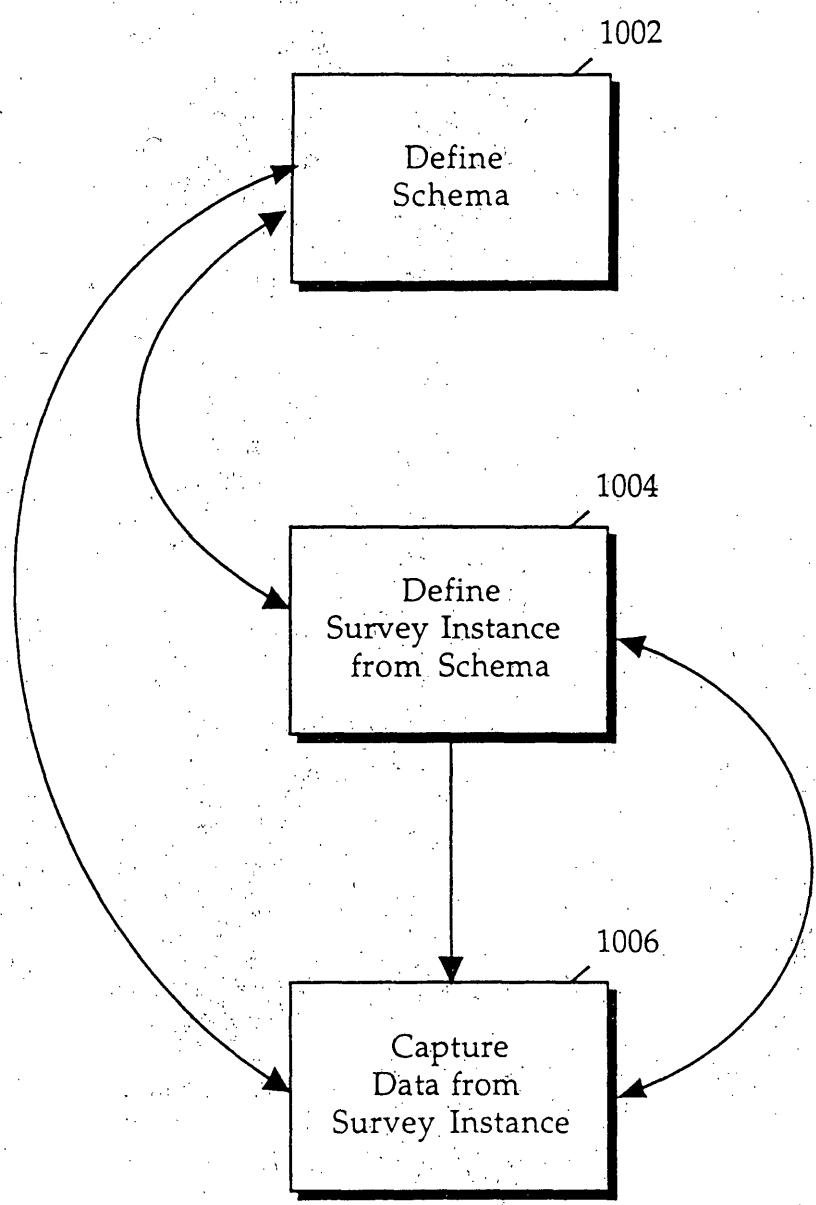


Figure 10

Testimony IntCode : 232
Interviewee : Sigi Hart

Spreadsheet... OK

Sections Collapse All Selected Question Group

Attend synagogue or church

Question	Answer 1	
Did your family attend a synagogue or church prior to the war? (Yes, No)	Yes	
	~ 1130A	
If so, how often? (Plain Text)	~ 1130B	
	Friday and Saturday every week	
Name and Location of synagogue, church, etc. (PIQLocation)	Place Nm: Heiderreyter Shul / Berlin (Germany) / Germany / Heiderreyter Gasse	
Name of synagogue or church leader? (PIQPerson)	~ 1130C ~ 1130D	

Keyword Answer Plain Text Answer

~ 1128 ~ 1124

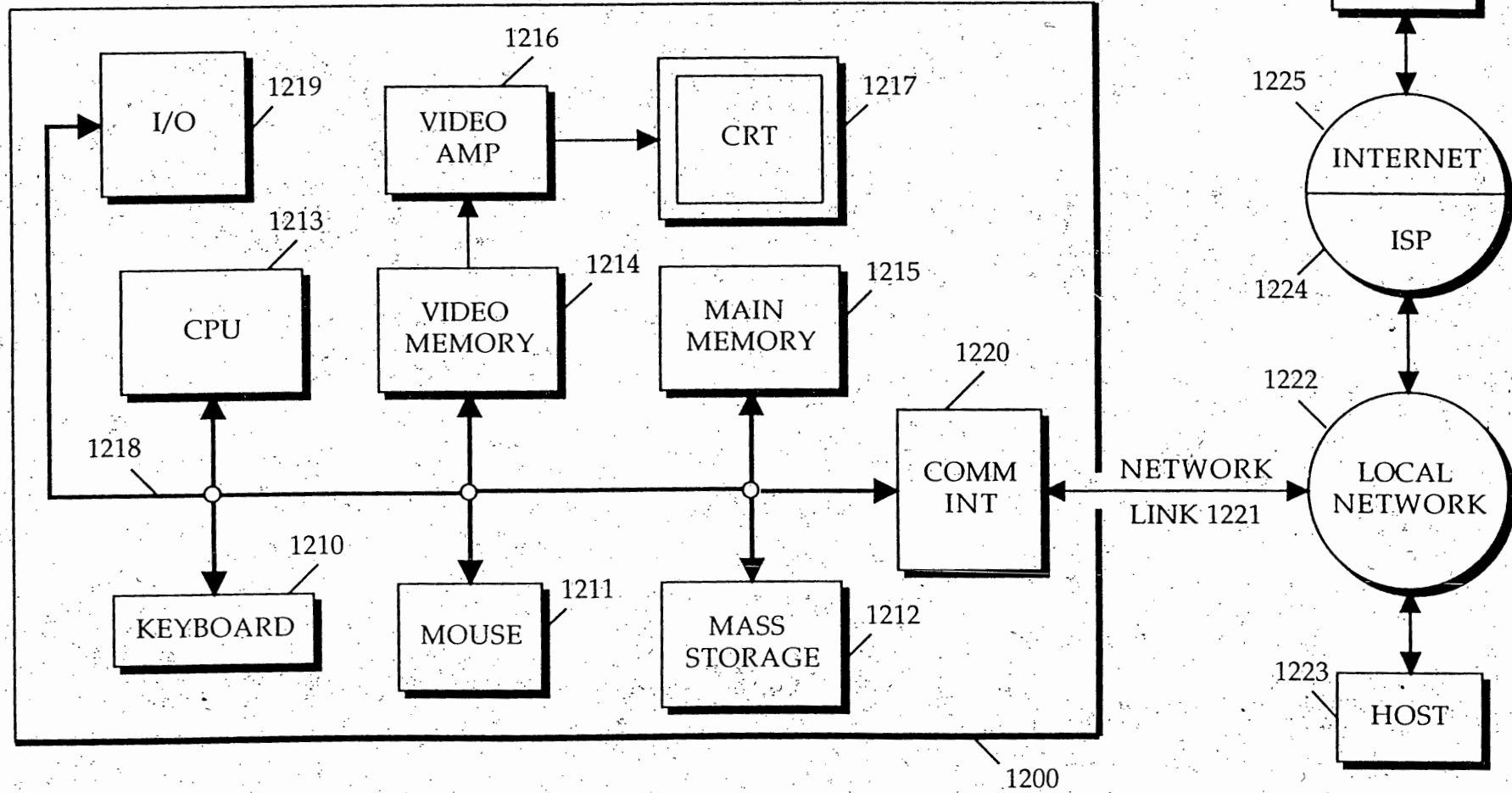
PIQ Persons

Type	Relationship	Name
PIQPerson	friends	, Simon,
PIQPerson	friends	[Diamond], , Mr.
PIQPerson	sisters-in-law	[Vogel], Michelle,
PIQPerson	aunts	[Vulkan], Freidel,
PIQPerson	grandfathers	Begleiter, ,
PIQPerson	grandmothers	Begleiter, ,
PIQPerson	aunts	Begleiter, Adela,
PIQPerson	uncles	Begleiter, Baruch,
PIQPerson	uncles	Begleiter, Isak,

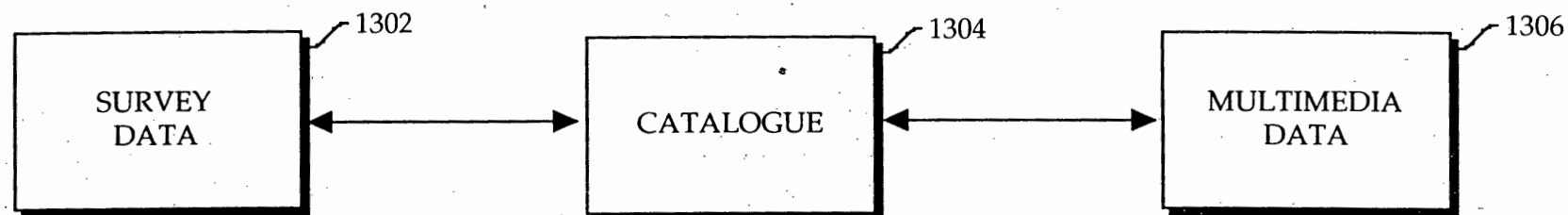
1102 1106 1108 1110 1112 1114 1104 1122 1126

FIGURE 11

FIGURE 12



PRINT OF DRAWINGS
AS ORIGINALLY FILED



PRINT OF DRAWINGS
AS ORIGINALLY FILED

Figure 13

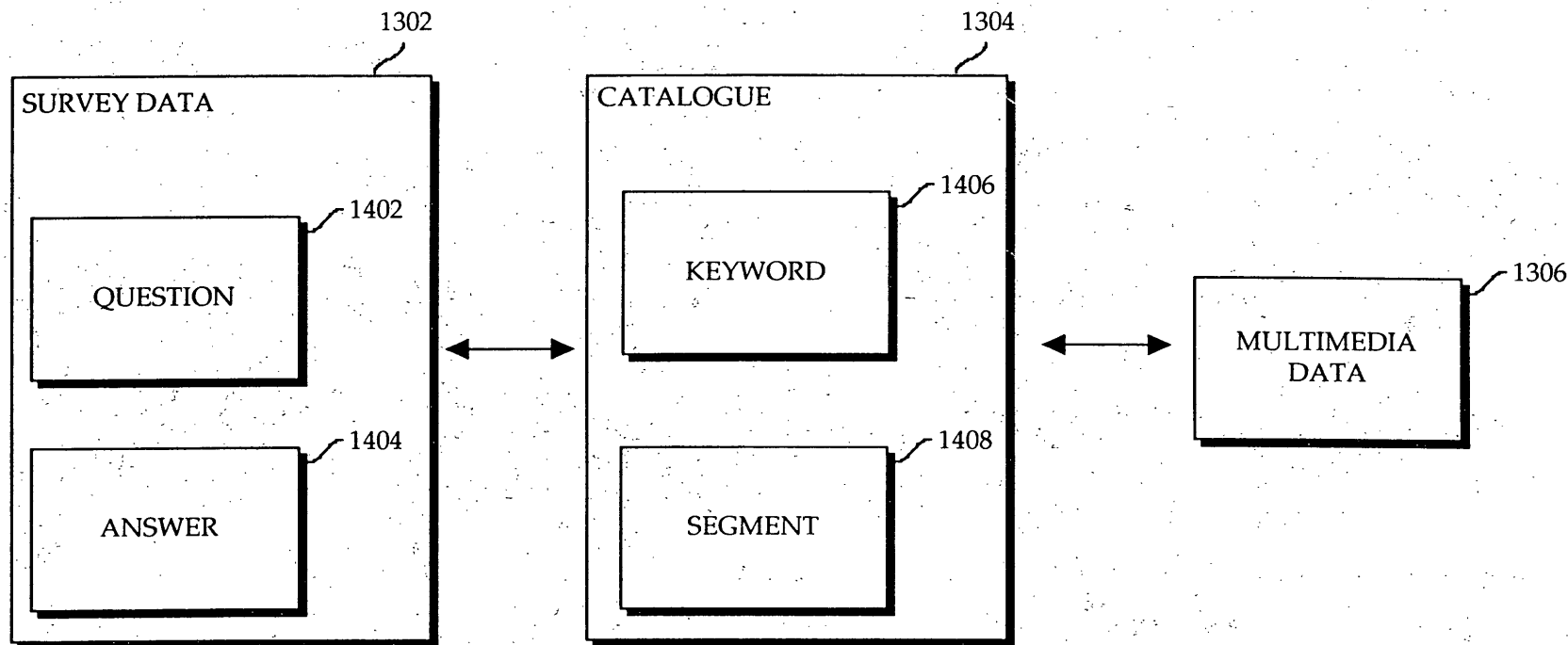


Figure 14

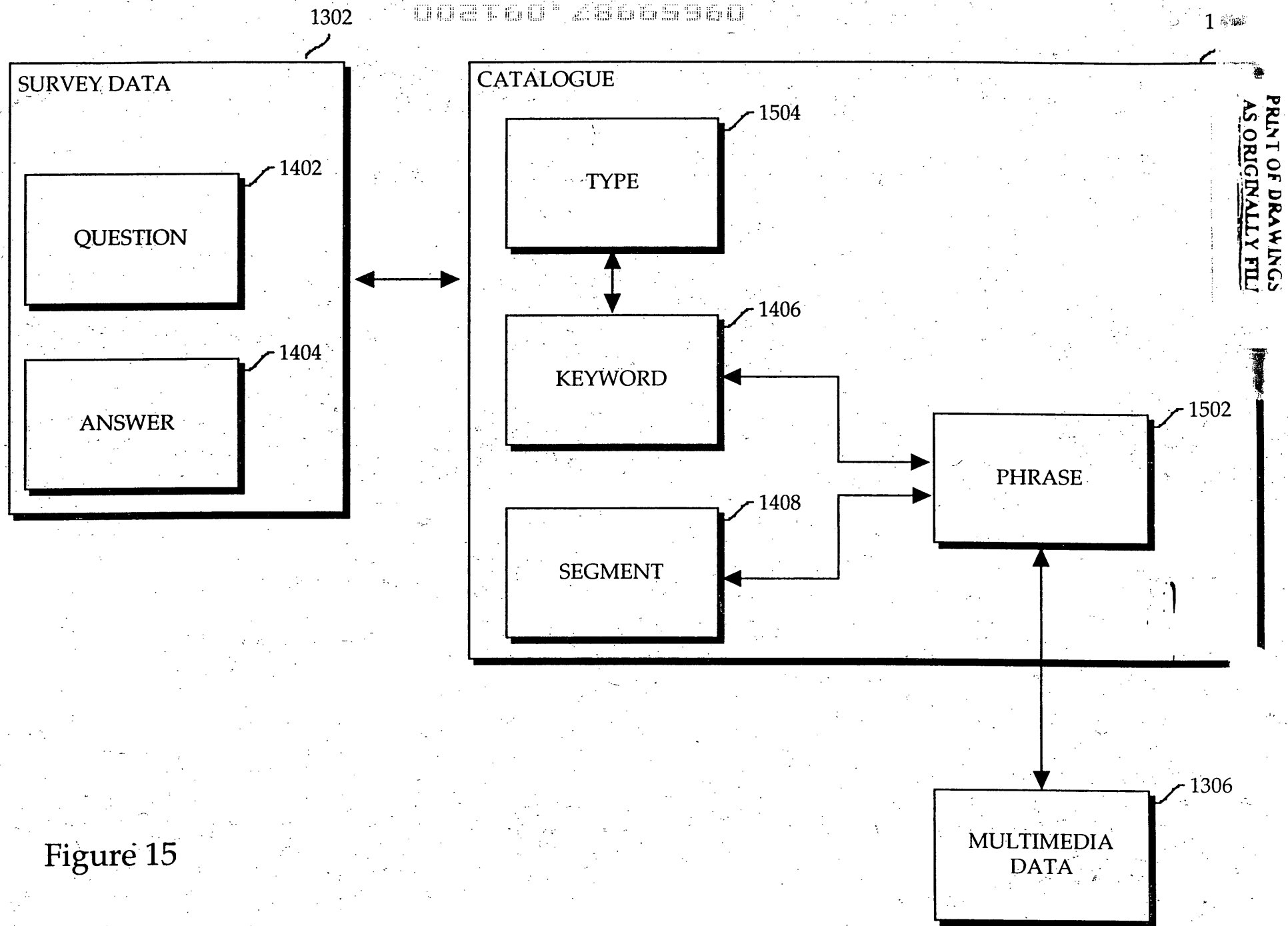


Figure 15

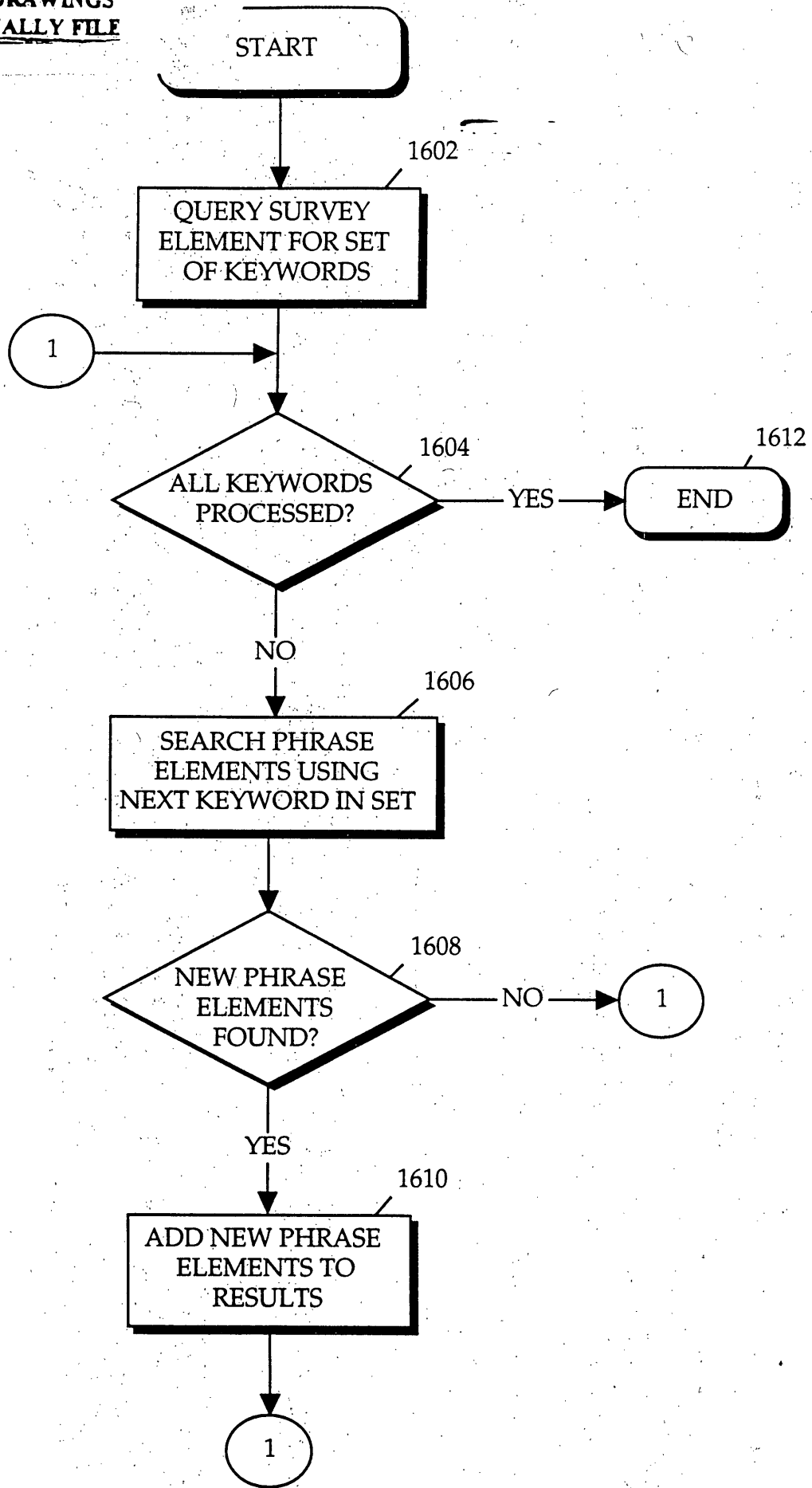


Figure 16

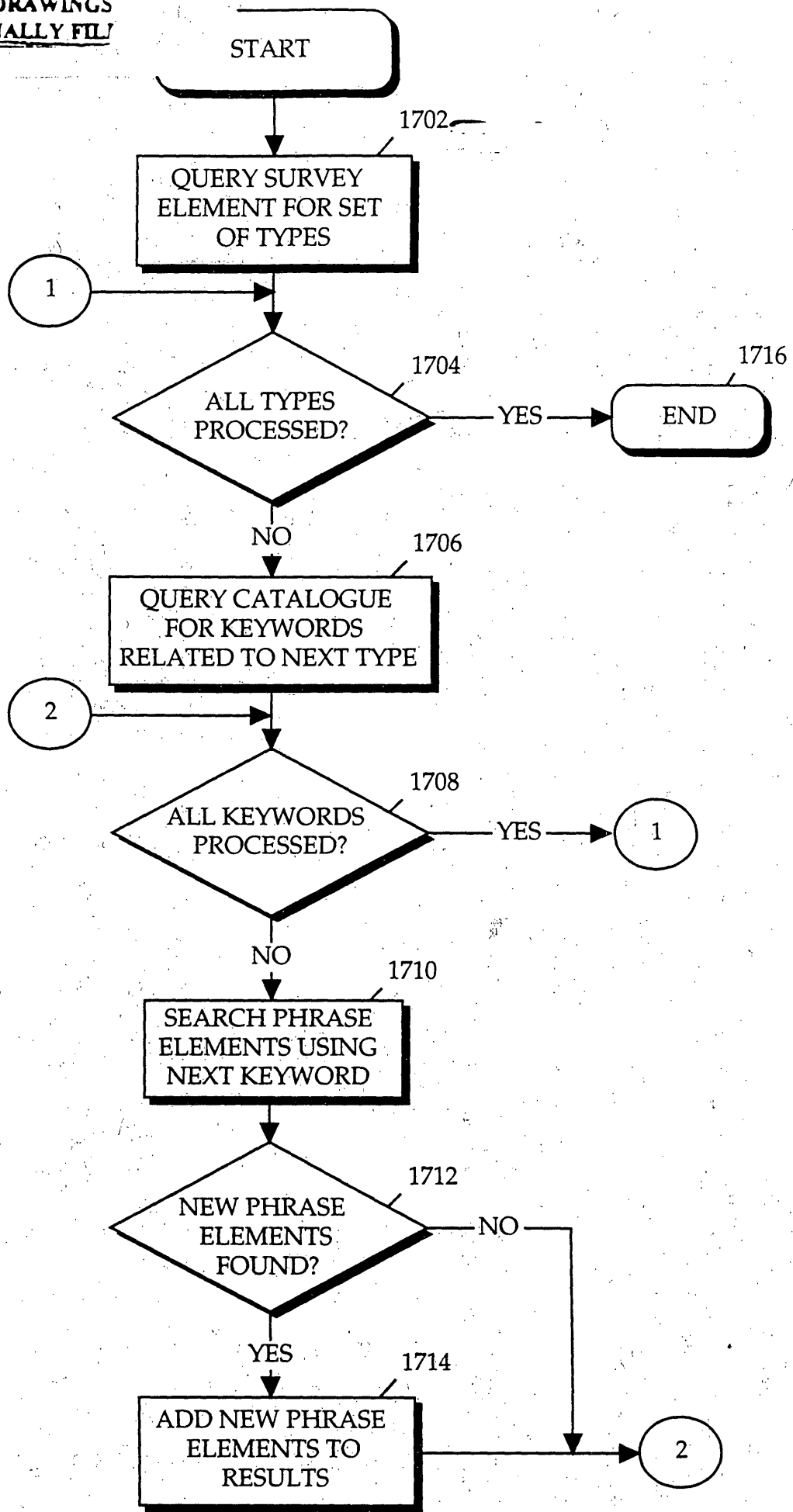


Figure 17

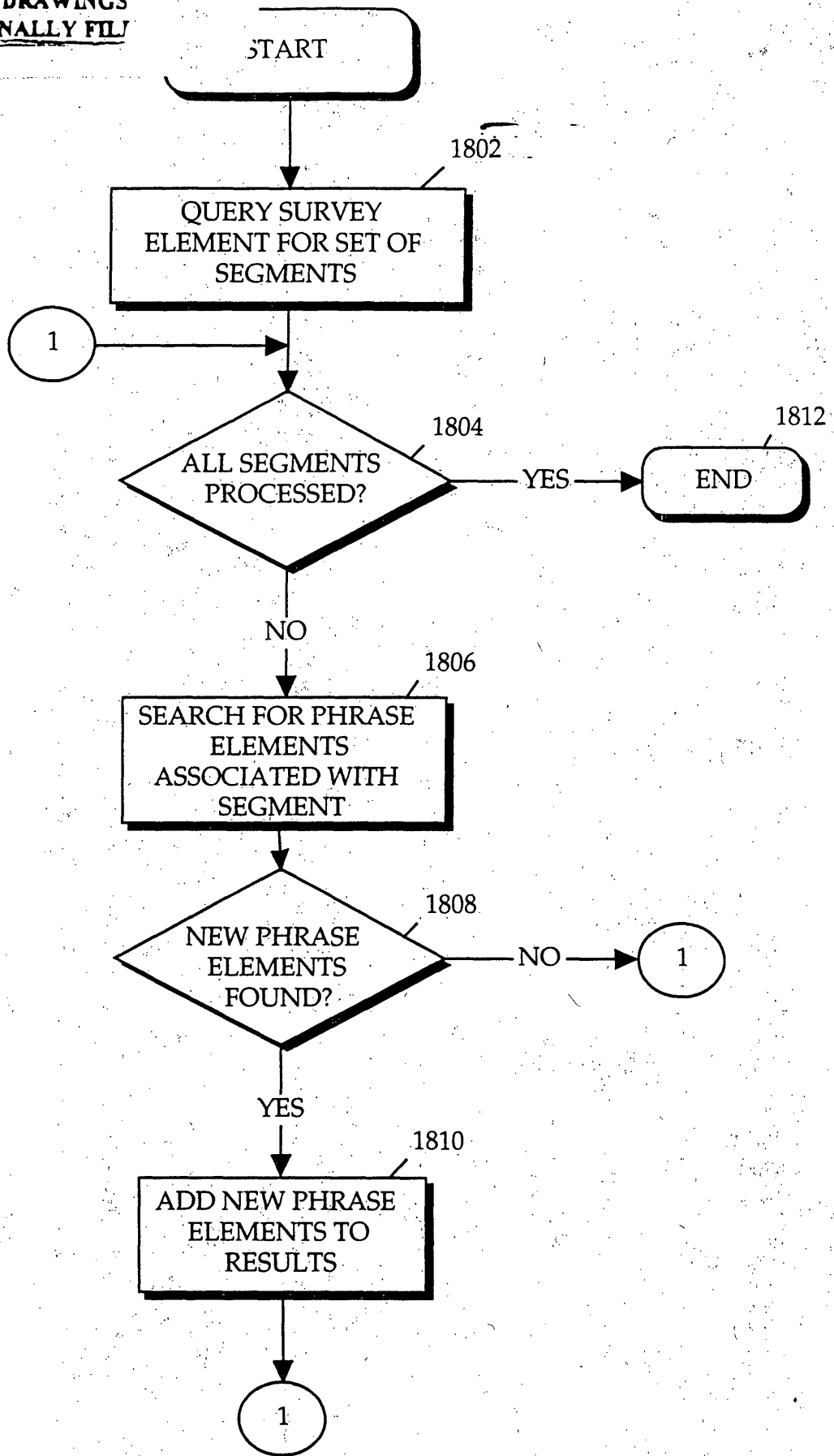
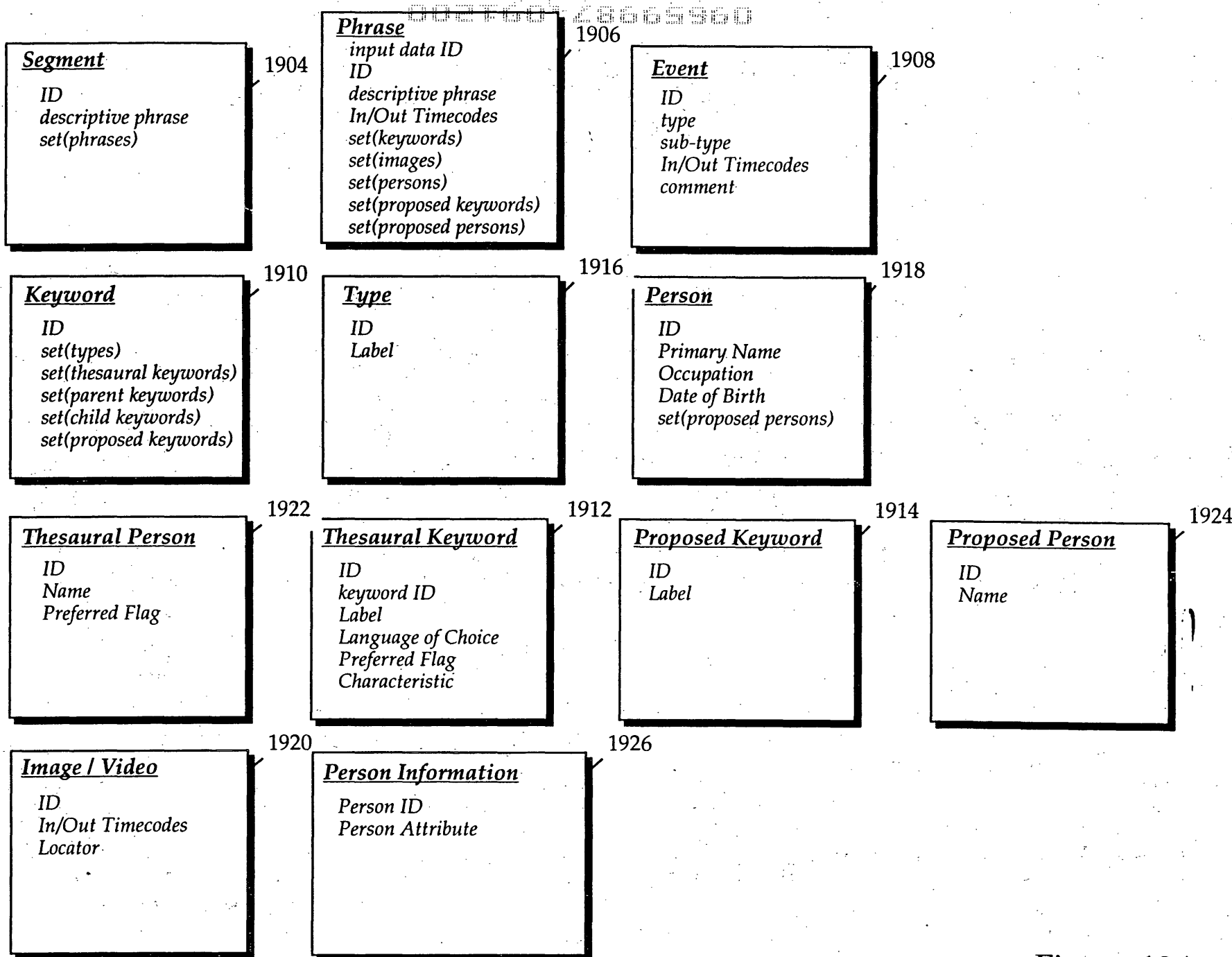


Figure 18



PRINT OF DRAWINGS
 AS ORIGINALLY FILED

Figure 19A

PRINT OF DRAWINGS
AS ORIGINALLY FILED

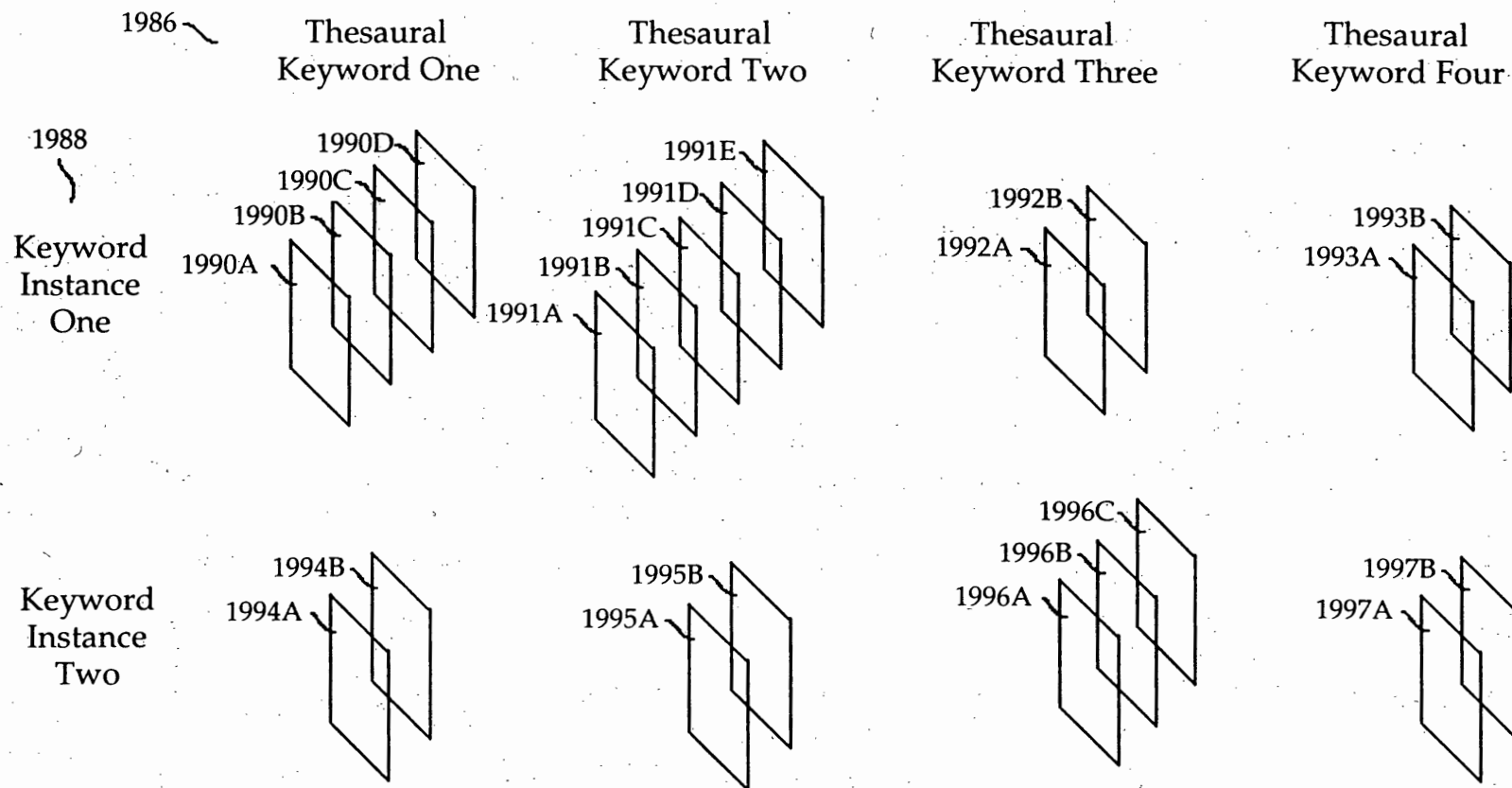


Figure 19C

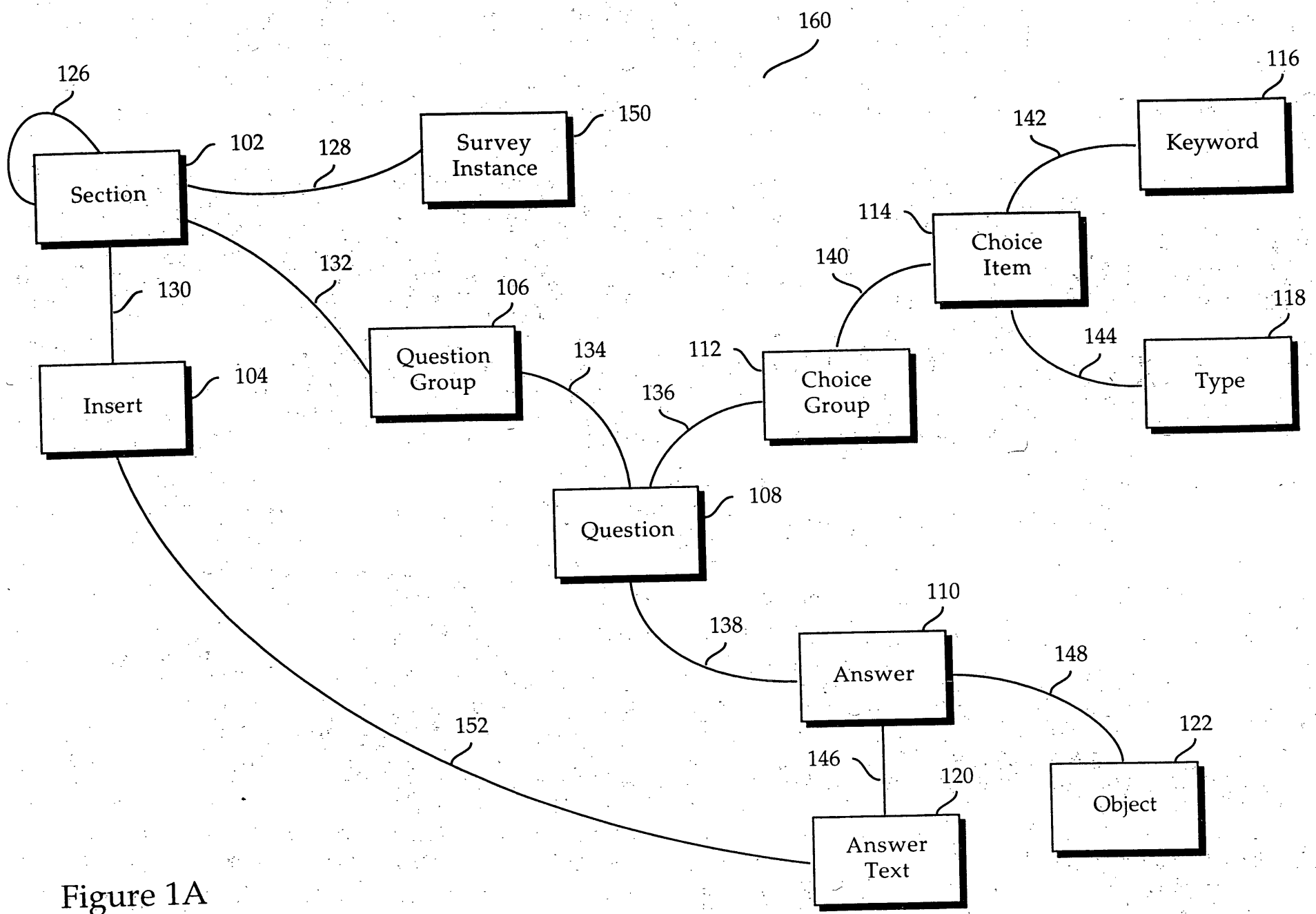


Figure 1A

102

Sections		
202	SectionID	int
204	ParentID	int
2002	SectionName	varchar(80)
	Sortorder	int
206	Insertion	tinyint
208	InsertType	tinyint
	InsertGroupID	int

102

SectionQ		
210	SectionQ_id	int
212	SectionID	int
214	QGroup_id	int
	Sonorder	int

130

106

QGroup		
216	QGroup_id	int
222	Description	varchar(255)
226	MultiEntry	tinyint

160

108

Question		
218	QGroup_id	int
220	QuestionID	int
	Sortorder	int
222	AnswerType	int
224	AnswerFormat	varchar(40)
224	KeywordGroupID	int
226	theQuestion	varchar(255)
228	ObjectType	int
230	DontReplicate	tinyint
232	NoTextEntry	tinyint

QBools		
	QuestionID	int
	KeywordID	int
	TrueFalse	tinyint

112

ChoiceGroup		
240	ChoiceGroupID	int
246	Label	varchar(100)

ChoiceItem		
242	ChoiceGroupID	int
244	KeywordID	int
246	TypeID	int
	Not_KeywordID	int

104

Insert		
248	Insert_id	int
250	SectionID	int
258	TestimonyID	int
	SectionName	varchar(80)
	Sortorder	int
278	InsertType	tinyint
	InsertObjectID	int

110

answer		
252	AnswerID	int
254	QuestionID	int
	SeriesID	int
256	InsertID	int
258	PersonID	int
260	AnswerType	int
262	ObjectType	int
264	ObjectID	int
	Label	varchar(255)
268	testimonyid	int
266	answertext	varchar(255)
	TextLength	int

120

Person		
268	PersonID	int
288	TestimonyID	int
	RelationID	int
	First	varchar(255)
	Middle	varchar(255)
	Last	varchar(255)
	DOB	datetime
	Gender	char(1)
	Interviewee	tinyint
	Survivor	tinyint
	RelationPlainText	varchar(255)
	Notes	varchar(255)
	DOBText	varchar(255)
	NoteText	text
	Title	varchar(255)

126

Alias		
272	AliasID	int
274	PersonID	int
	AliastypeID	int
	First	varchar(255)
	Middle	varchar(255)
	Last	varchar(255)
	Other	varchar(255)
	AliasTypePlainText	varchar(255)
	Title	varchar(255)
	Notes	text

124

Location		
276	LocationID	int
288	TestimonyID	int
	SpecificLocID	int
	SpecIFICLocPlainText	varchar(255)
	CityKWID	int
	CityPlainText	varchar(255)
	StateKWID	int
	StatePlainText	varchar(255)
	CountryKWID	int
	CountryPlainText	varchar(255)
	PostalCode	varchar(20)
	NearCityKWID	int
	NearCityPlainText	varchar(255)
	PlaceNmKWID	int
	PlaceNmPlainText	varchar(255)
	LocationTypePlainText	varchar(255)
	LocationType	int
	StreetAddress	varchar(255)

120

answertext		
290	answerid	int
292	answertext	text

302
N

304
N
314

Sections...

- ▶ 1. Entry Details
- ▶ 2. Front Page
- ▶ 3. General Interview Detail
- ▶ 4. Interviewee Information
- ▼ 5. Prewar Life
 - Prewar Addresses
 - Household members (extended)
 - Organizational Affiliation
 - Activities & Interests
 - Attend synagogue or church
- ▶ 6. Wartime
- ▶ 7. Postwar
- ▶ 8. Family / People in This
- ▶ 9. Family Identity
- ▶ 10. Post-Interview Informa
- ▶ 11. Interviewer Information
- ▶ 12. Notes
- ▶ 13. Rescue and Aid Insert
- ▶ 14. War Crime Trials
- ▶ 15. Liberation Insert Sectic
- ▶ xxx Non-Catalogueable
- ▶ Unused Questions...

Currently Selected Question Group...

Attend synagogue or church

Answer Type	Question Text	Format	Keyword Group	Object Type	Don't Replicate
Boolean	Did your family attend a synagogue or church?	Yes/No			Don't Repl
Plain Text	If so, how often?				
Object	Name and Location of synagogue, church, etc.			Location Person	
Object	Name of synagogue or church leader?				
Single Select	Position Title? (Rabbi, priest, reverend, etc.)		Religious Leaders		

330

332

334

336

Done

316

Collapse All

FIGURE 3

The image shows a screenshot of a software dialog box titled "ADD SECTION". The dialog box contains the following elements:

- Parent Section:** A dropdown menu.
- Section Name:** A text input field.
- Insert:** A checkbox.
- Insert Type:** A list box with two visible entries, each with a dropdown arrow.
- Buttons:** "Cancel" and "Save" buttons.

Handwritten annotations include:

- "402" pointing to the top border of the dialog box.
- "404" pointing to the "Parent Section" dropdown.
- "406" pointing to the "Section Name" text field.
- "408" pointing to the "Insert Type" list box.
- "410" pointing to the "Save" button.
- "412" pointing to the "Insert" checkbox.

FIGURE 4A

A screenshot of a software dialog box titled "ADD QUESTION GROUP". The dialog box contains the following elements: a title bar with the text "ADD QUESTION GROUP"; a "Parent Section" label followed by a dropdown menu; a "Group Title" label followed by a text input field; a "Multi-Entry" checkbox with the label "Multi-Entry" to its right; and two buttons at the bottom, "Cancel" and "Save". Handwritten annotations include the number "422" pointing to the title bar, "424" pointing to the "Parent Section" dropdown, "426" pointing to the "Group Title" input field, "430" pointing to the "Multi-Entry" checkbox, and "428" pointing to the "Save" button.

FIGURE 4B

Sections...

- 1. PIQ Entry Details
- 2. Front Page
- 3. General Interview Detail
- 4. Interviewee Information
- 5. Prewar Life
 - Prewar Addresses
 - Household members (extended)
 - Organizational Affiliation
 - Activities & Interests
 - Attend synagogue or church
- 6. Wartime
- 7. Postwar
- 8. Family / People in
- 9. Family Identity
- 10. Post-Interview
- 11. Interviewer Info
- 12. Notes
- 13. Rescue and Aid
- 14. War Crime Trials
- 15. Liberation Inser
- xxx Non-Cataloguea
- U.Used Questions...

Currently Selected Question Group...

Attend synagogue or church

Answer Type	Question Text	Format	Key word Group	Object Type	Don't Replicate
Boolean	Did your family attend a synagogue or church?	Yes/No			Don't Repl
Plain Text	If so, how often?				
Object	Name and Location of synagogue, church, etc.			PIQ_Location	
Object	Name of synagogue or church leader?			PIQ_Person	
Single Select	Position Title? (Rabbi, priest, reverand, etc.)		Religious Leaders		

Edit Question... Question Group: Attend synagogue or church

Question Text: Name of synagogue or church leader? Don't Replicate:

Answer Type:

- Plain Text
- Boolean
- Date
- Single Select
- Multi Select
- Object

PIQ_Person

Relation Type: Religious Leaders (ML)

Buttons: Add Section, Delete Section, Coll, Done, Cancel, Save

Handwritten annotations: 516, 502, 504, 506, 510, 512, 514

FIGURE 5

Choice Groups

ID	Choice Group
18	Alias Types
19	Alias Types - Mandatory
173	Arrived from? (ML)
247	Attributes and Roles
242	Camps (cc, pow, intern)
164	Camps (ML)
163	Children (ML)
238	Circumstances of release
2	Cities, towns, villages, shtetls

604 Drag from Keyword Authority to Admin Choices

When a Keyword is dragged, the Keyword will be added to both "Admin Choices" and "User View".

When a Type is dragged, the Type is displayed in "Admin Choices" and the current keywords of that Type are added to "User View".

If an inappropriate keyword appears in "User View" from dragging a Type, it may be excluded by dragging it to the trash. This allows the user to create a list of exceptions to a desired Type.

602

User view:

Item	Source
(P)Q post-liberation con. camps	Type
Jasenovac (Yugoslavia : Camp)	Type
camps in Yugoslavia (CONTAINER ONL	Type
prisoner of war camps	Type
Stalag IV G, Dschätz (Germany : POW	Type
Kulmhof (Poland : Camp)	Type
Sobibor (Poland : Camp)	Type
Auschwitz II-Birkenau (Poland : Camp	Type
Treblinka II (Poland : Camp)	Type
Belzec II (Poland : Camp)	Type
SS mobile construction brigades	KW
concentration camps, Slovak	Type
Balf (Hungary : Camp)	Type
Csepel (Hungary : Camp)	Type
Hajduhadhaz (Hungary : Camp)	Type
Koeszeg (Hungary : Camp)	Type

608

Admin choices:

Choice	Source
concentration camps	Type
NOT (z)Brauweiler (Germany : Camp	Type
NOT (z)Breitenau (1933-1934) (Ger	Type
NOT (z)Breslau-Dürrgoy (Germany : Type	Type
NOT (z)Bürgermoor (Germany : Camp	Type
NOT (z)Chemnitz (Germany : Camp)	Type
NOT (z)Colditz (1933-1934) (Germ: Type	Type
NOT (z)Columbia-Haus (Germany : C: Type	Type
NOT (z)Dresden-Trachenberge (Gerr	Type
NOT (z)Gollnow (Germany : Camp)	Type
NOT (z)Hammerstein (Germany : Can	Type
NOT (z)Heuberg (Germany : Camp)	Type
NOT (z)Hohnstein (Germany : Camp)	Type
NOT (z)Langlütjen (Germany : Camp)	Type
NOT (z)Lichtenburg (Germany : Camp	Type
NOT (z)Ochtumsand (Germany : Camp	Type

610

612

614

Keyword Authority

Keyword	Type
> academic life (CONTAINER ON	Miscellaneous
> cultural and social life (CON	cultural and so
> discrimination and intoleranc	Miscellaneous
> economic life (CONTAINER ON	Miscellaneous
> family life	family life
> food and eating (CONTAINER C	Food and Drink
> forced labor experience (COM	Miscellaneous
> government and political life	Miscellaneous
> health and health services (C	Miscellaneous
> hiding	hiding
> incarceration (CONTAINER OI	Miscellaneous
> Jewish life (CONTAINER ONL	Miscellaneous

616

618

Cancel Save

FIGURE 6

Testimony IntCode : 232
Interviewee : Sigi Har

Add PIQPerson Object
5. Prewar Life: Name of synagogue or church leader? (PIQPerson.)

Relation to Interviewee: *704*

First:

Middle: *706*

Last:

Title:

Date of Birth:

Gender: Male Female Unspecified *708*

Survivor: Yes No Unspecified

Notes About This Person:

Instructions: 1) Double-click to start data entry. 2) 'Alias Type' is REQUIRED to save an Alias record.

Alias Type	First	Middle	Last	Title
release name				
release maiden name				
current name				
name at birth				
last name during war	<i>710</i>			
Hebrew name				
Yiddish name				
maiden name				
nickname				

Paste Name <- Highlight a line, then Use this button to paste the PIQ Person's name on the line. Cancel OK

702

Next Answer

FIGURE 7

TestimonyIntCode: 232
 Interviewee: Chai Mast

Edit Location Object
 5. Prewar Life: Name and Location of synagogue, church, etc. (FIQLocation.)

Type of Location: *~906*

Enter Plain Text *910* Click to select, Drag a Keyword *912*
 Cmd-F to Search *~* *904z*

Place Name (Camp, School, Ghetto, etc.):

Street Address:

City/Town/Village/Shtetle: *914*

Nearest Large City:

State/Province:

Country:

Postal Code:

Specific Location: *908*

Keywords...
 PIQ Choices
 Keyword
 Click a box to fill in this list. Then drag a keyword.

Proposed Keywords

Proposed Keyword	Comments

Paste Location Cancel OK

Taskbar: (ML)AD(AD4z=select label, comments, ppkwid, pkw)

FIGURE 9

00000000000000000000

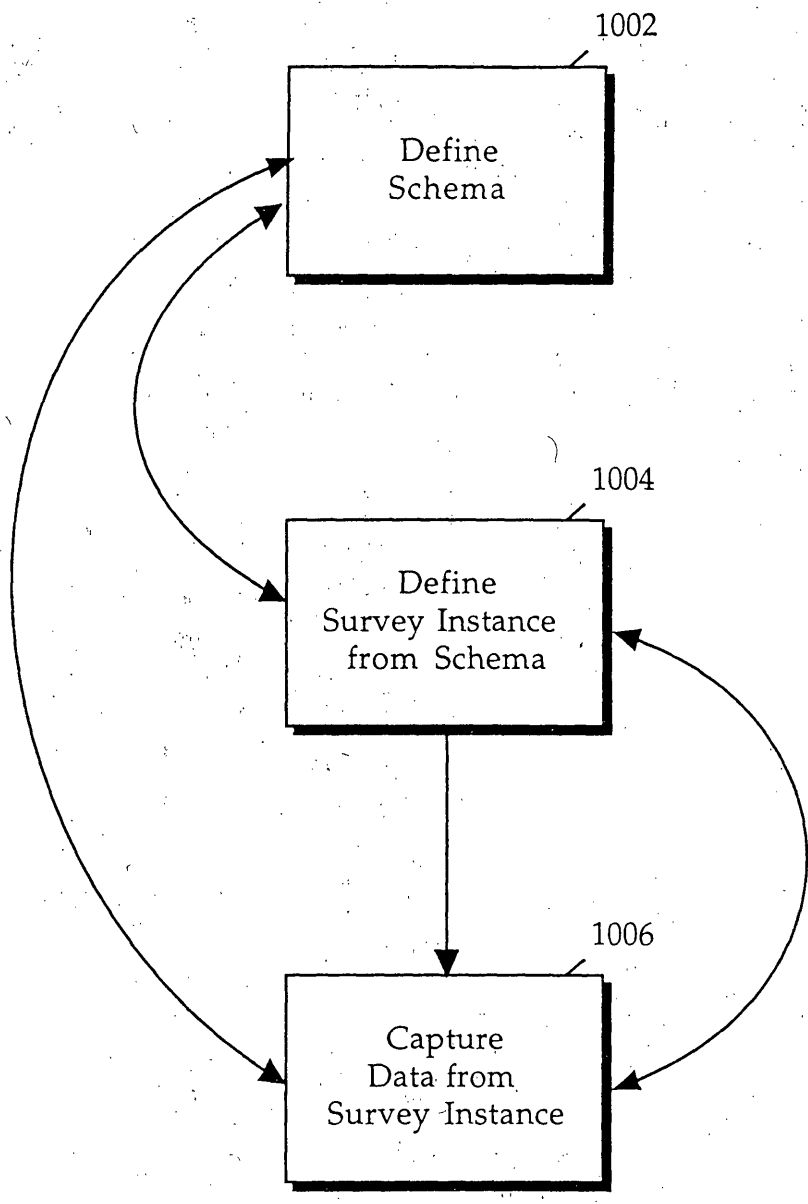


Figure 10

Testimony IntCode: 232
Interviewee: Sigi Hart

Spreadsheet...
OK

Sections Collapse All

- ▶ 1. Entry Details
- ▶ 2. Front Page
- ▶ 3. General Interview Details
- ▶ 4. Interviewee Information
- ▶ 5. Prewar Life
 - Prewar Addresses
 - Household members (extended family & other)
 - Organizational Affiliation
 - Activities & Interests
 - Attend synagogue or church
- ▶ 6. Wartime
- ▶ 7. Postwar
- ▶ 8. Family / People in This Testimony
- ▶ 9. Family Identity
- ▶ 10. Post-Interview Information
- ▶ 11. Interviewer Information
- ▶ 12. Notes
- ▶ 13. Recue and Aid Insert (name)
- ▶ 14. War Crime Trials
- ▶ 15. Liberation Insert Section
- ▶ xxx Non-Catalogueable PIQ Questions

Selected Question Group

Attend synagogue or church 1116 1118 1120

Question	Answer	
Did your family attend a synagogue or church prior to the war? (Yes, No)	Yes	
	~ 1130A	
If so; how often? (Plain Text)	~ 1130B	
	Friday and Saturday every week	
Name and Location of synagogue, church, etc. (PIQLocation)	Place Nm: Heidereyer Shul / Berlin (Germany) / Germany / Heidereyer Gasse	
Name of synagogue or church leader? (PIQPerson)	~ 1130C ~ 1130D	

Keyword Answer
Plain Text Answer

Keywords

PIQ Choices

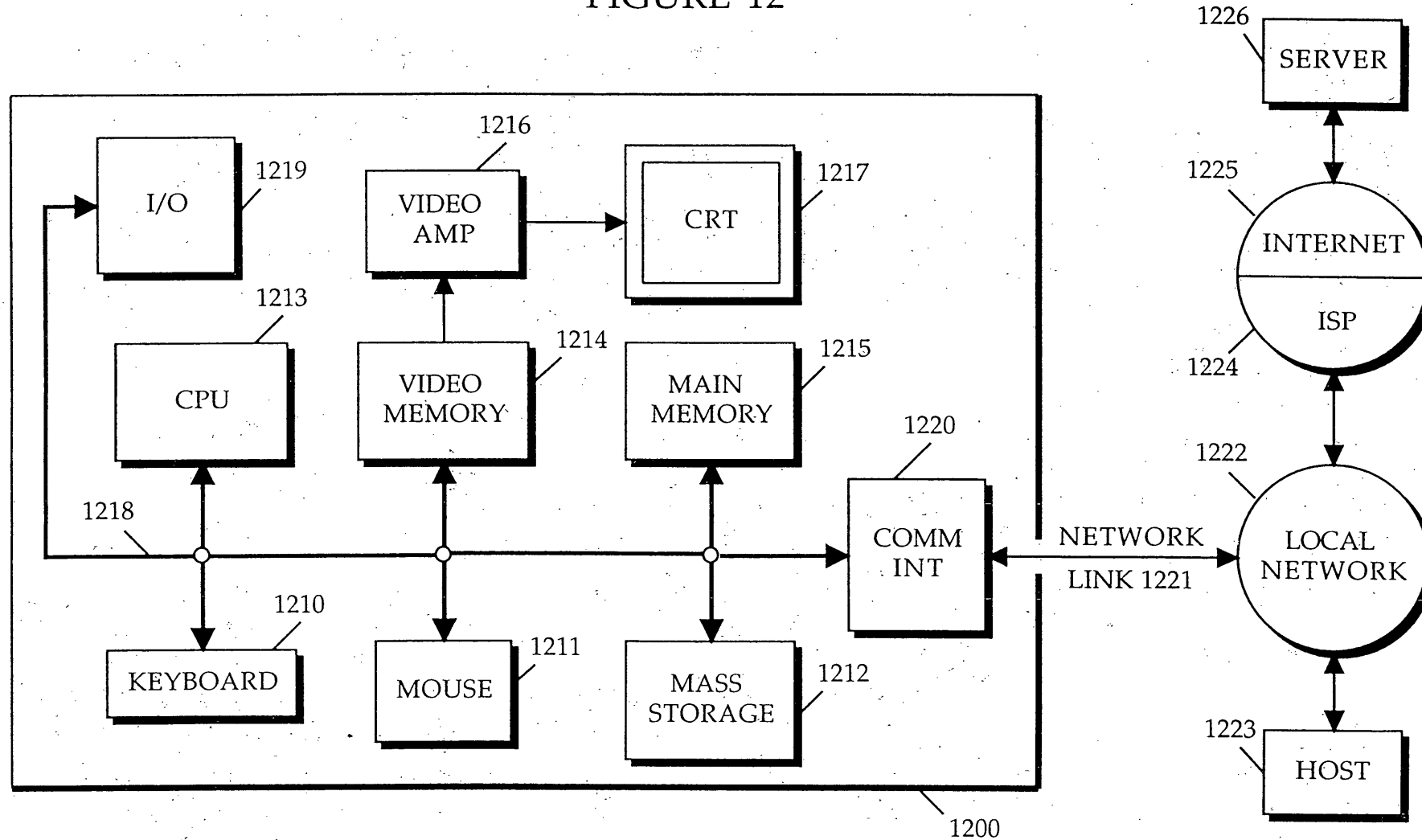
Keyword

PIQ Persons Prop

Type	Relationship	Name
PIQPerson	friends	, Simon,
PIQPerson	friends	[Diamond], , Mr.
PIQPerson	sisters-in-law	[Vogel], Michelle,
PIQPerson	aunts	[Vulkan], Freidel,
PIQPerson	grandfathers	Begleiter, ,
PIQPerson	grandmothers	Begleiter, ,
▶ PIQPerson	aunts	Begleiter, Adela,
PIQPerson	uncles	Begleiter, Baruch,
PIQPerson	uncles	Begleiter, Isak,

1126
FIGURE 11

FIGURE 12



002760 2865960

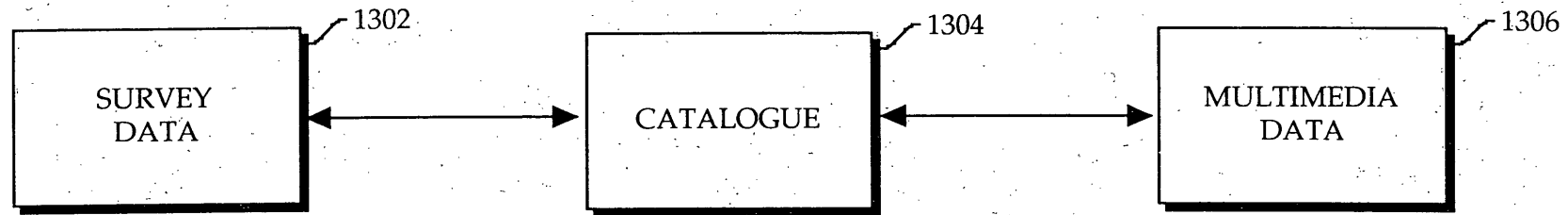


Figure 13

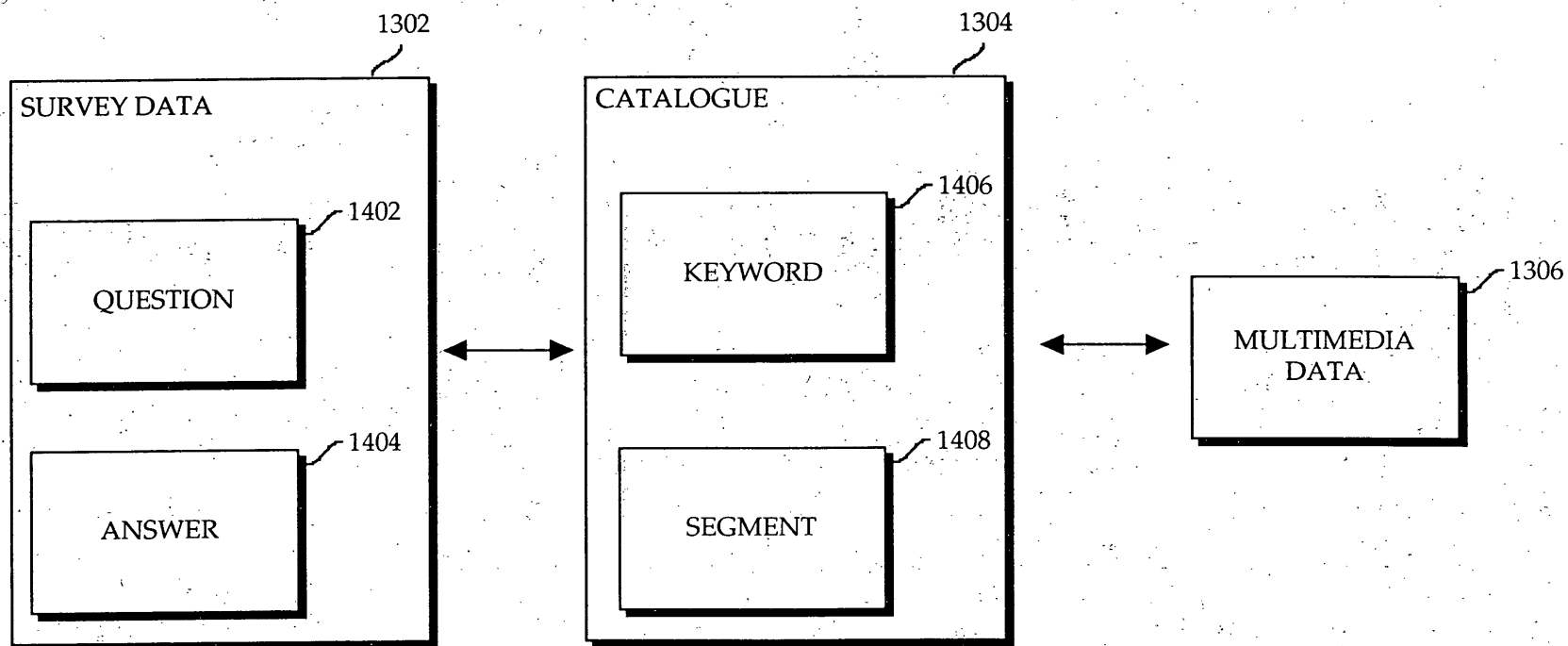


Figure 14

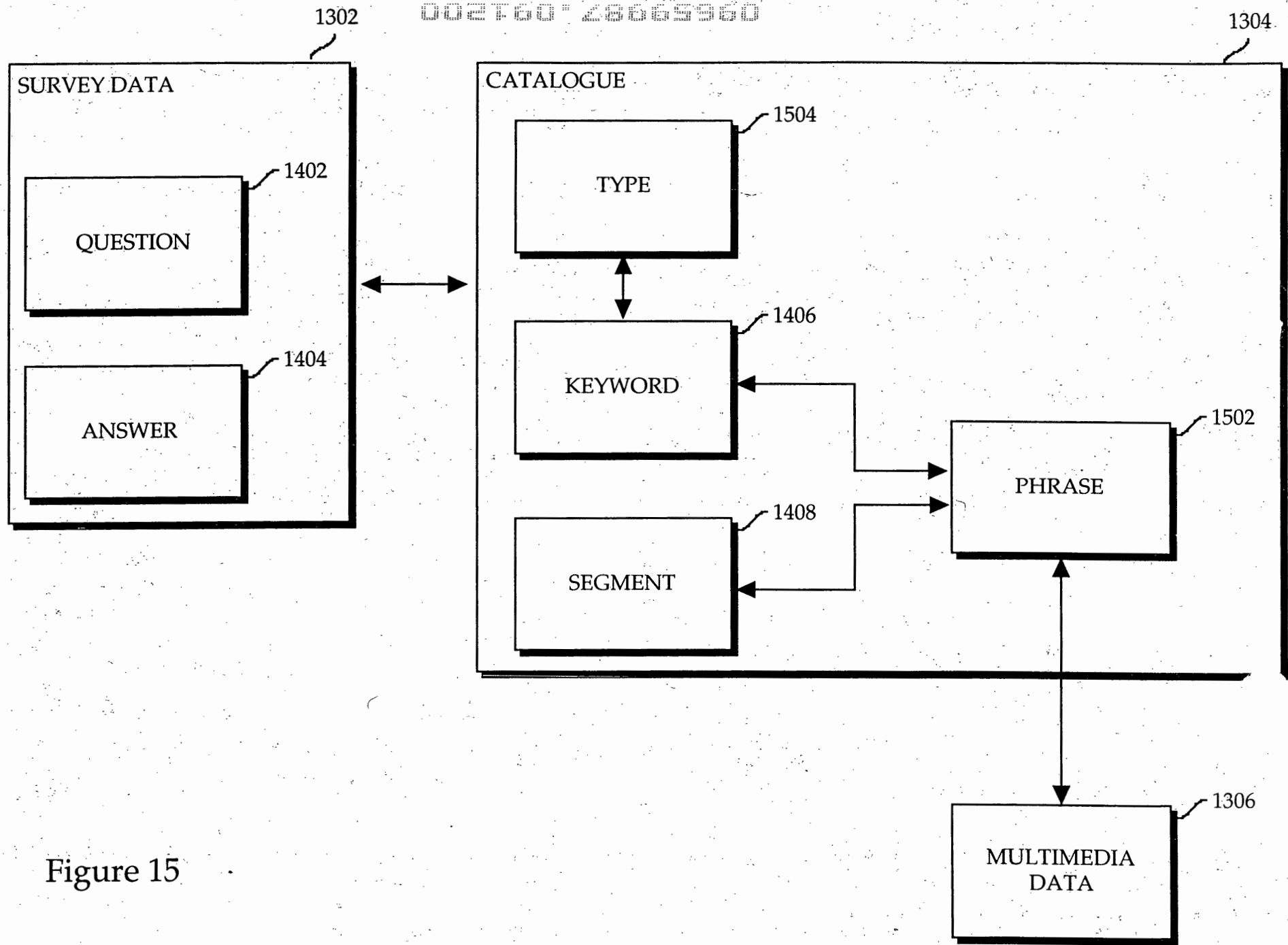


Figure 15

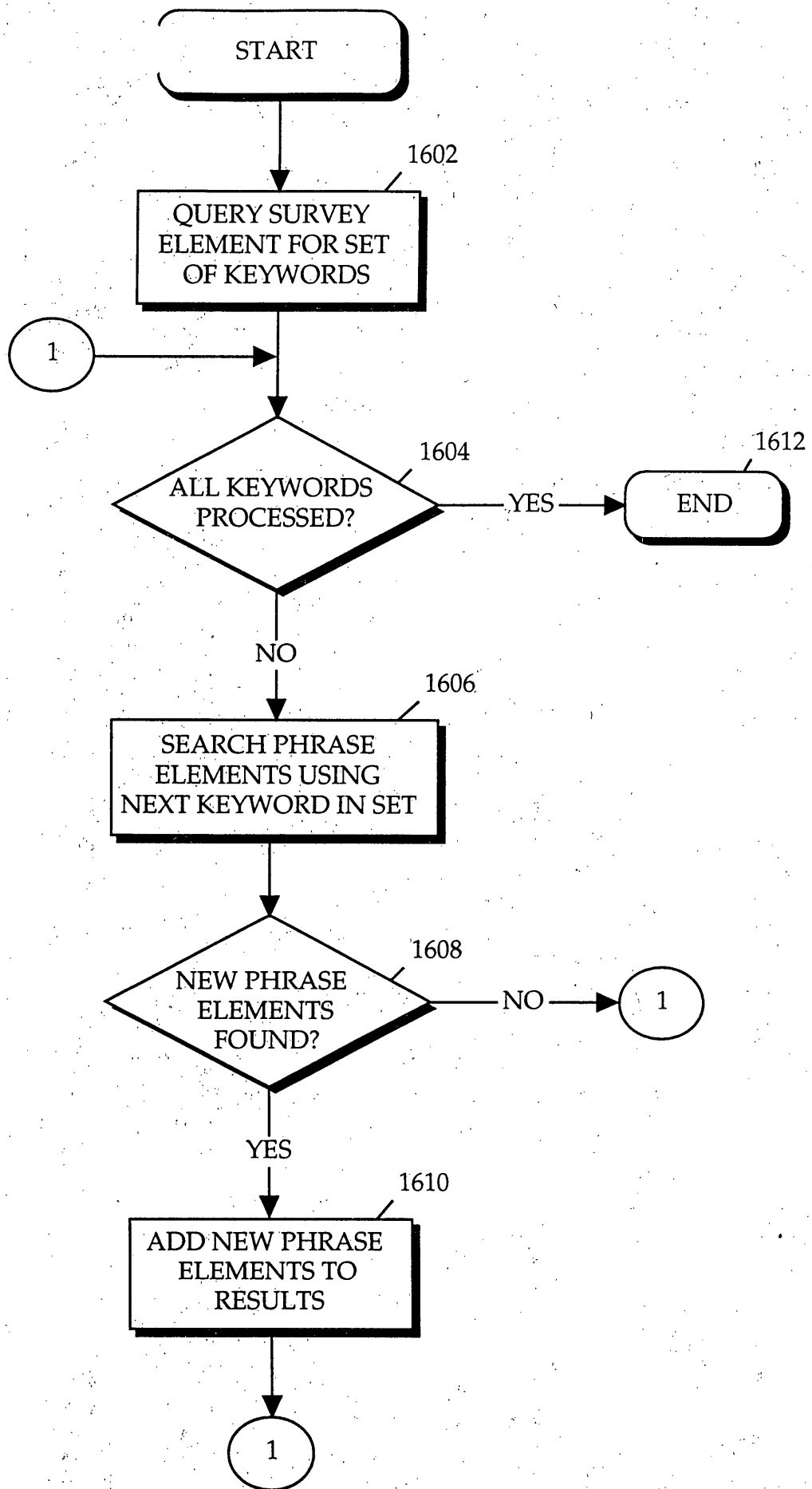


Figure 16

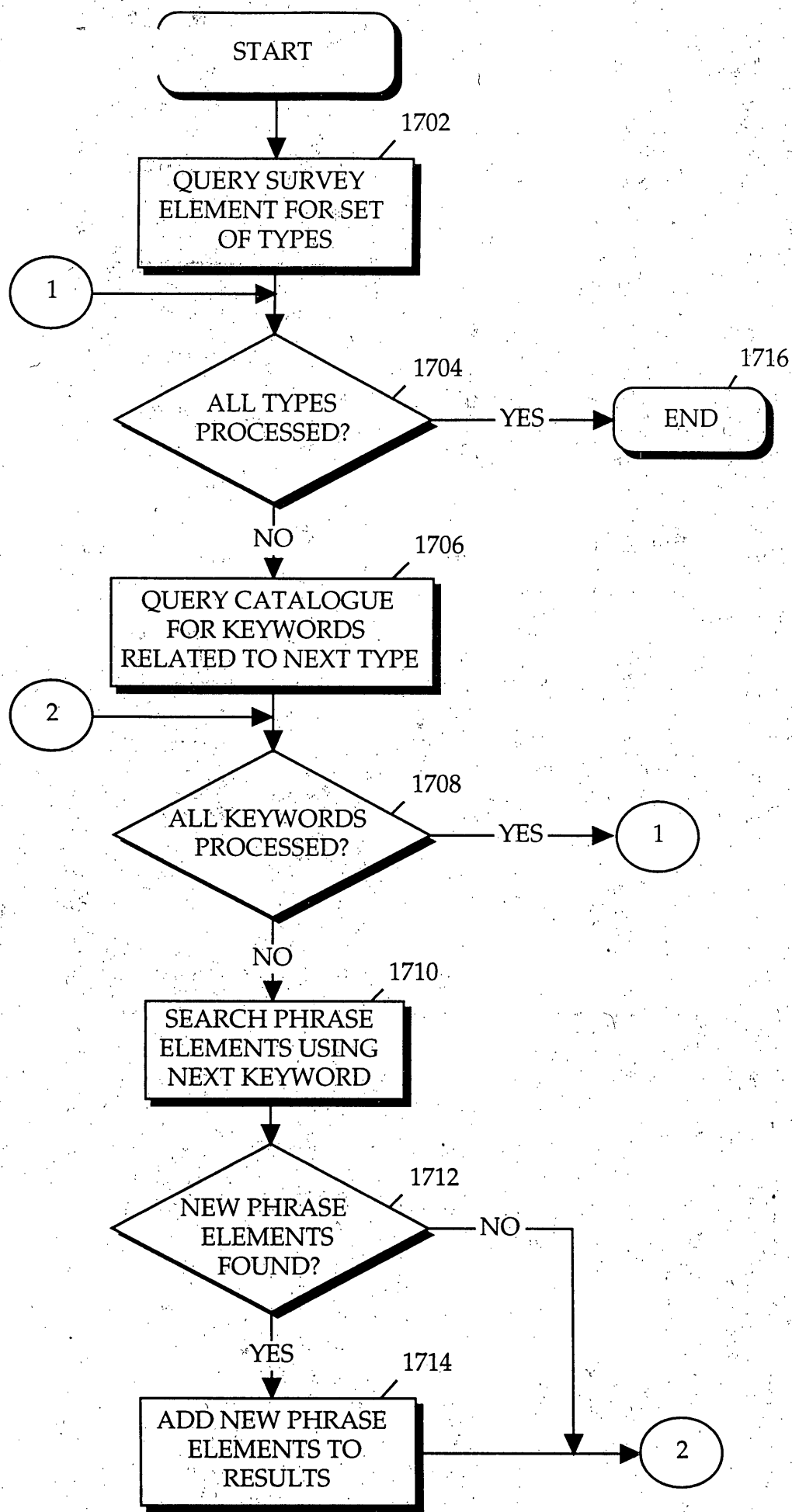


Figure 17

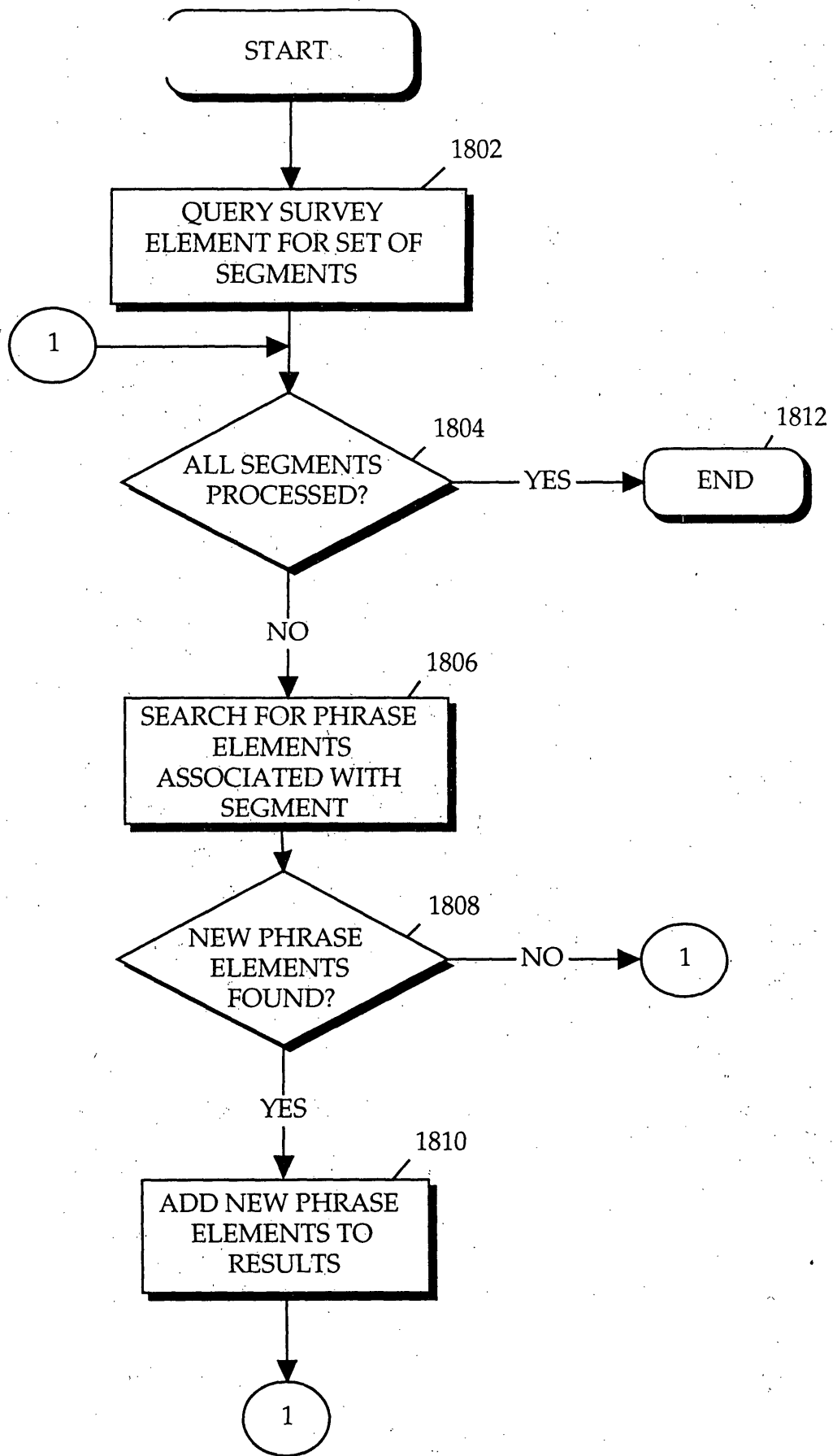


Figure 18

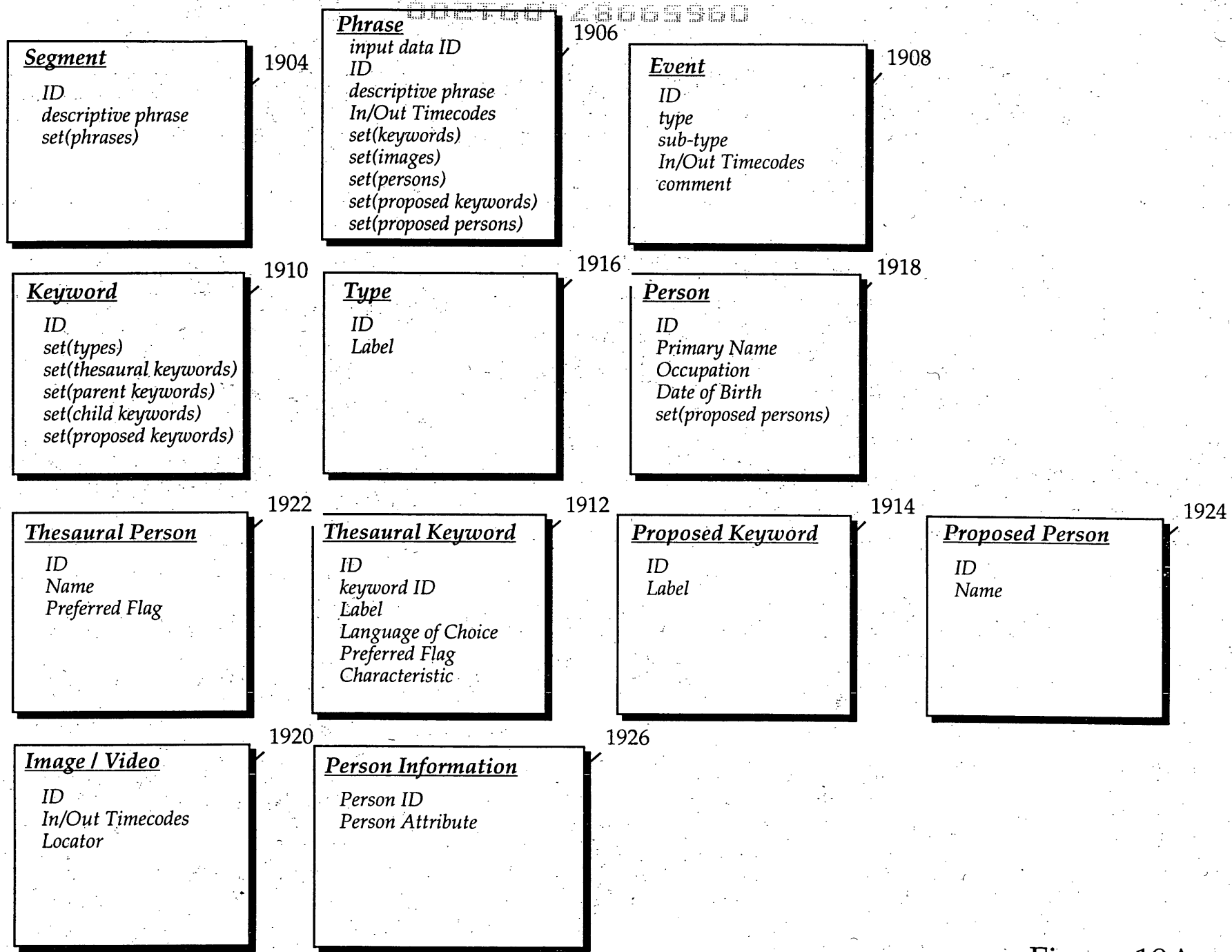


Figure 19A

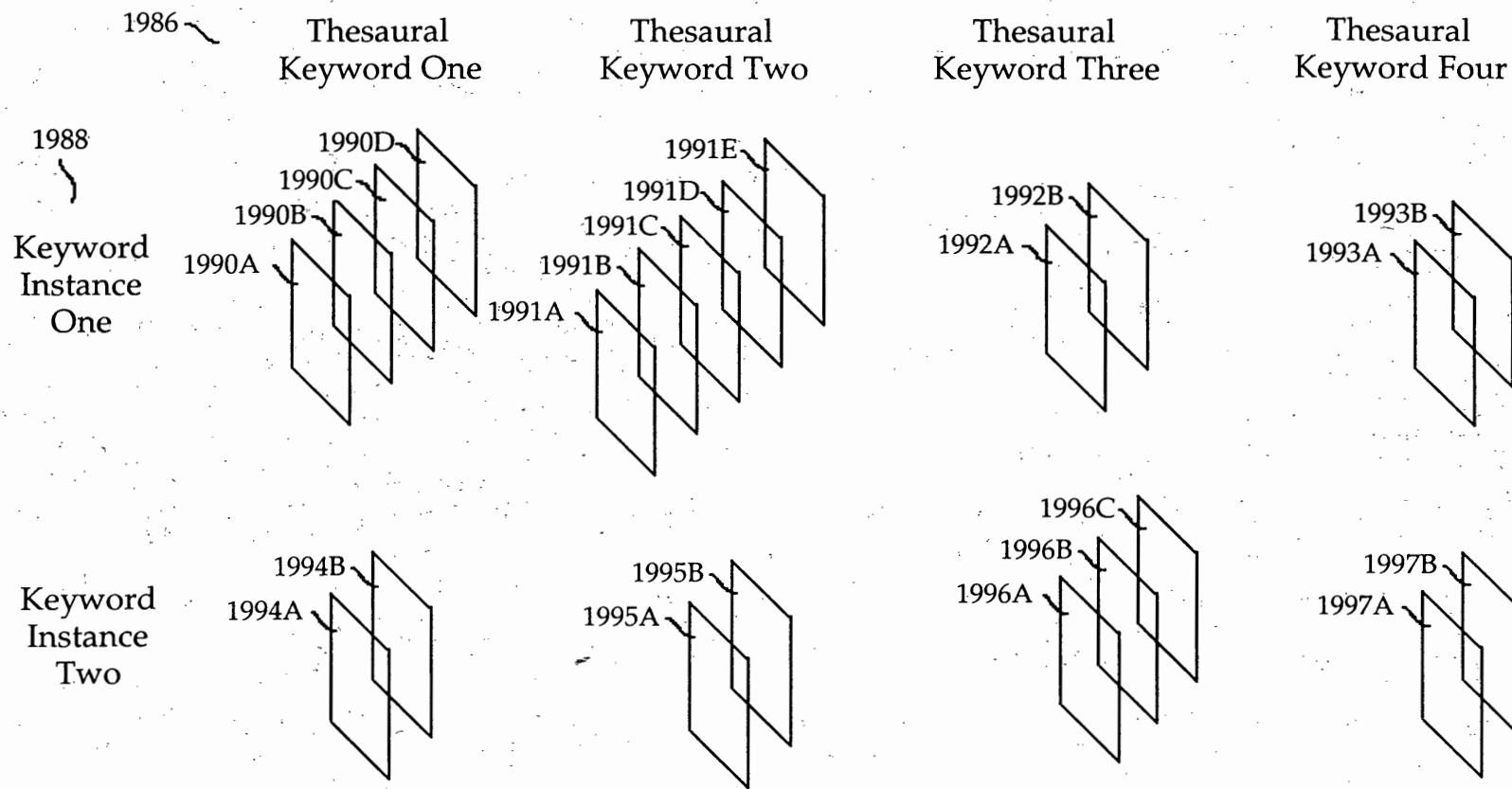


Figure 19C


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APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/659,987	09/12/2000	Samuel Gustman	84300.916

The Hecker Law Group
 Gary A Hecker
 Suite 2300
 1925 Century Park East
 Los Angeles, CA 90067

FORMALITIES LETTER


OC00000005532394

Date Mailed: 11/06/2000

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION
FILED UNDER 37 CFR 1.53(b)
Filing Date Granted

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given TWO MONTHS from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The statutory basic filing fee is missing.
Applicant must submit \$ 690 to complete the basic filing fee and/or file a small entity statement claiming such status (37 CFR 1.27).
- Total additional claim fee(s) for this application is \$108.
 - \$108 for 6 total claims over 20.
- The oath or declaration is missing.
A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.
- **The balance due by applicant is \$ 928.**

*A copy of this notice **MUST** be returned with the reply.*

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#3



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THIS FILE IS ASSIGNED TO GAU 2171.



Sector \$ ✓

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PTO/SB/21 (08-00)
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 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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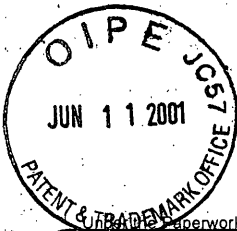
TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i>	Application Number	09/659,987
	Filing Date	September 12, 2000
	First Named Inventor	SAMUEL GUSTMAN
	Group Art Unit	2171
	Examiner Name	UNASSIGNED
Total Number of Pages in This Submission	Attorney Docket Number	84300.916

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input checked="" type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input checked="" type="checkbox"/> Response to Missing Parts/ Incomplete Application <input checked="" type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input checked="" type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input checked="" type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below): Check for \$1,459.00; Certificate of First Class Mail; Return Receipt postcard; *See Remarks
Remarks		APPLICANT HEREBY REQUESTS A FIVE-MONTH EXTENSION TO THE NOTICE DATED NOVEMBER 6, 2000.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	The Hecker Law Group By: Gary A. Hecker Esq.
Signature	
Date	June 5, 2001

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: 06-05-01	
Typed or printed name	Christine Mills
Signature	Date June 5, 2001

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



#4

PTO/SB/17 (11-00)

Approved for use through 10/31/2002, OMB 0651-0032
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<h1 style="margin: 0;">FEE TRANSMITTAL</h1> <h2 style="margin: 0;">for FY 2001</h2> <p style="font-size: small; margin: 5px 0;">Patent fees are subject to annual revision.</p>	Complete if Known	
	Application Number	09/659,987
	Filing Date	September 12, 1998
	First Named Inventor	SAMUEL GUSTMAN
	Examiner Name	UNASSIGNED
	Group Art Unit	2171
TOTAL AMOUNT OF PAYMENT		(\$ 1,459.00)
		Attorney Docket No. 84300.916

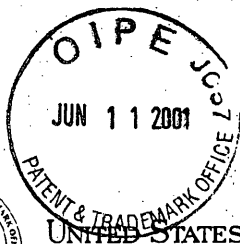
<h3 style="text-align: center;">METHOD OF PAYMENT</h3> <p>1. <input type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:</p> <p>Deposit Account Number: _____ Deposit Account Name: _____</p> <p><input type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17 <input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27</p> <p>2. <input checked="" type="checkbox"/> Payment Enclosed: <input checked="" type="checkbox"/> Check <input type="checkbox"/> Credit card <input type="checkbox"/> Money Order <input type="checkbox"/> Other</p>	<h3 style="text-align: center;">FEE CALCULATION (continued)</h3> <h4 style="text-align: center;">3. ADDITIONAL FEES</h4> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Fee Code</th> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td></td><td>Surcharge - late filing fee or oath</td><td>65.00</td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td></td><td>Surcharge - late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td></td><td>Non-English specification</td><td></td></tr> <tr><td>147</td><td>2,520</td><td>147</td><td>2,520</td><td></td><td>For filing a request for <i>ex parte</i> reexamination</td><td></td></tr> <tr><td>112</td><td>920*</td><td>112</td><td>920*</td><td></td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113</td><td>1,840*</td><td>113</td><td>1,840*</td><td></td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td></td><td>Extension for reply within first month</td><td></td></tr> <tr><td>116</td><td>390</td><td>216</td><td>195</td><td></td><td>Extension for reply within second month</td><td></td></tr> <tr><td>117</td><td>890</td><td>217</td><td>445</td><td></td><td>Extension for reply within third month</td><td></td></tr> <tr><td>118</td><td>1,390</td><td>218</td><td>695</td><td></td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>128</td><td>1,890</td><td>228</td><td>945</td><td></td><td>Extension for reply within fifth month</td><td>945.00</td></tr> <tr><td>119</td><td>310</td><td>219</td><td>155</td><td></td><td>Notice of Appeal</td><td></td></tr> <tr><td>120</td><td>310</td><td>220</td><td>155</td><td></td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121</td><td>270</td><td>221</td><td>135</td><td></td><td>Request for oral hearing</td><td></td></tr> <tr><td>138</td><td>1,510</td><td>138</td><td>1,510</td><td></td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td></td><td>Petition to revive - unavoidable</td><td></td></tr> <tr><td>141</td><td>1,240</td><td>241</td><td>620</td><td></td><td>Petition to revive - unintentional</td><td></td></tr> <tr><td>142</td><td>1,240</td><td>242</td><td>620</td><td></td><td>Utility issue fee (or reissue)</td><td></td></tr> <tr><td>143</td><td>440</td><td>243</td><td>220</td><td></td><td>Design issue fee</td><td></td></tr> <tr><td>144</td><td>600</td><td>244</td><td>300</td><td></td><td>Plant issue fee</td><td></td></tr> <tr><td>122</td><td>130</td><td>122</td><td>130</td><td></td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>123</td><td>50</td><td>123</td><td>50</td><td></td><td>Processing fee under 37 CFR 1.17(q)</td><td></td></tr> <tr><td>126</td><td>180</td><td>126</td><td>180</td><td></td><td>Submission of Information Disclosure Stmt.</td><td></td></tr> <tr><td>581</td><td>40</td><td>581</td><td>40</td><td></td><td>Recording each patent assignment per property (times number of properties)</td><td>40.00</td></tr> <tr><td>146</td><td>710</td><td>246</td><td>355</td><td></td><td>Filing a submission after final rejection (37 CFR § 1.129(a))</td><td></td></tr> <tr><td>149</td><td>710</td><td>249</td><td>355</td><td></td><td>For each additional invention to be examined (37 CFR § 1.129(b))</td><td></td></tr> <tr><td>179</td><td>710</td><td>279</td><td>355</td><td></td><td>Request for Continued Examination (RCE)</td><td></td></tr> <tr><td>169</td><td>900</td><td>169</td><td>900</td><td></td><td>Request for expedited examination of a design application</td><td></td></tr> <tr><td colspan="6">Other fee (specify) _____</td><td></td></tr> <tr> <td colspan="6" style="text-align: right;">*Reduced by Basic Filing Fee Paid</td> <td style="text-align: right;">SUBTOTAL (3) (\$ 1,050.00)</td> </tr> </tbody> </table>	Fee Code	Large Entity		Small Entity		Fee Description	Fee Paid	Fee (\$)	Fee Code	Fee (\$)	Fee Code	105	130	205	65		Surcharge - late filing fee or oath	65.00	127	50	227	25		Surcharge - late provisional filing fee or cover sheet		139	130	139	130		Non-English specification		147	2,520	147	2,520		For filing a request for <i>ex parte</i> reexamination		112	920*	112	920*		Requesting publication of SIR prior to Examiner action		113	1,840*	113	1,840*		Requesting publication of SIR after Examiner action		115	110	215	55		Extension for reply within first month		116	390	216	195		Extension for reply within second month		117	890	217	445		Extension for reply within third month		118	1,390	218	695		Extension for reply within fourth month		128	1,890	228	945		Extension for reply within fifth month	945.00	119	310	219	155		Notice of Appeal		120	310	220	155		Filing a brief in support of an appeal		121	270	221	135		Request for oral hearing		138	1,510	138	1,510		Petition to institute a public use proceeding		140	110	240	55		Petition to revive - unavoidable		141	1,240	241	620		Petition to revive - unintentional		142	1,240	242	620		Utility issue fee (or reissue)		143	440	243	220		Design issue fee		144	600	244	300		Plant issue fee		122	130	122	130		Petitions to the Commissioner		123	50	123	50		Processing fee under 37 CFR 1.17(q)		126	180	126	180		Submission of Information Disclosure Stmt.		581	40	581	40		Recording each patent assignment per property (times number of properties)	40.00	146	710	246	355		Filing a submission after final rejection (37 CFR § 1.129(a))		149	710	249	355		For each additional invention to be examined (37 CFR § 1.129(b))		179	710	279	355		Request for Continued Examination (RCE)		169	900	169	900		Request for expedited examination of a design application		Other fee (specify) _____							*Reduced by Basic Filing Fee Paid						SUBTOTAL (3) (\$ 1,050.00)
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SUBMITTED BY		Complete (if applicable)	
Name (Print/Type)	Gary A. Hecker, Esq.	Registration No. (Attorney/Agent)	31,023
Signature		Telephone	(310)286-0377
		Date	June 5, 2001

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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Page 1 of 2
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UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/659,987	09/12/2000	Samuel Gustman	84300.916

FORMALITIES LETTER



The Hecker Law Group
Gary A Hecker
Suite 2300
1925 Century Park East
Los Angeles, CA 90067

Date Mailed: 11/06/2000

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

09/12/2001 SMINASSI 00000036 09659987

FILED UNDER 37 CFR 1.53(b)

09/12/2001 355.00 OP
09/12/2001 54.00 OP
09/12/2001 65.00 OP

Filing Date Granted

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given TWO MONTHS from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The statutory basic filing fee is missing.
Applicant must submit \$ 690 to complete the basic filing fee and/or file a small entity statement claiming such status (37 CFR 1.27).
- Total additional claim fee(s) for this application is \$108.
 - \$108 for 6 total claims over 20.
- The oath or declaration is missing.
A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.
- The balance due by applicant is \$ 928.

A copy of this notice **MUST** be returned with the reply.

[Handwritten Signature]

Customer Service Center
Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE

Law Group
ED
ATTY
APP. *[Signature]*
11/10/00
c/e N/F new
N/F died
D/L resp. due 11/4/00

file://C:\APPS\PreExam\correspondence\2_B.xml

Application Assignment Record

According to the application transmittal letter, an assignment recording ownership was filed with this application; however, a copy of this record was not located in the original file history record obtained from the United States Patent and Trademark Office. Upon your request, we will attempt to obtain the assignment documents from the Assignment Recordation Branch of the United States Patent and Trademark Office or from a related application case (if applicable). Please note that additional charges will apply for this service.

This page is not part of the official USPTO record. It has been determined that content identified on this document is missing from the original file history record.

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As below named inventors, We hereby declare that:

Our residence, post office addresses and citizenship are as stated below, next to our names,

We believe we are the original, first and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled

METHOD AND APPARATUS FOR CATALOGUING MULTIMEDIA DATA USING SURVEYING DATA

the specification of which

XXX is attached hereto.
was filed on September 12, 2000 as
Application Serial No. 09/659,987
and was amended on _____
(if applicable)

We hereby state that we have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. We do not know and do not believe that the same was ever known or used in the United States of America before my invention thereof, or patented or described in any printed publication in any country before my invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, and that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months prior to this application.

We acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

We hereby claim foreign priority benefits under Title 35, United States Code, §119, of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

<u>Prior Foreign Application(s)</u>			<u>Priority Claimed</u>	
<u>(Number)</u>	<u>(Country)</u>	<u>(Day/Month/Year Filed)</u>	<u>Yes</u>	<u>No</u>
____	____	____	____	____
____	____	____	____	____
____	____	____	____	____

Our Ref.: 84300.916

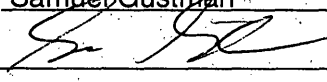
We hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, We acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.) (Filing Date) (Status -- patented,
pending, abandoned)

(Application Serial No.) (Filing Date) (Status -- patented,
pending, abandoned)

We hereby appoint THE HECKER LAW GROUP, a firm including: Gary A. Hecker, Reg. No. 31,023; Angelo Gaz, Reg. No. 45,907; Obi Iloputaife, Reg. No. 45677, with offices located at 1925 Century Park East, Suite 2300, Los Angeles, California 90067, telephone (310) 286-0377, as our attorneys with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith.

We hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of Inventor Samuel Gustman
Inventor's Signature  Date 4/12/01
Residence Santa Monica CA Citizenship US
(City, State) (Country)
Post Office Address PO Box 3168
Los Angeles CA 90078-3168

Our Ref.: 84300.916

Full Name of Inventor Barbara DeLury
Inventor's Signature *Barbara DeLury* Date 04/06/01
Residence LOS ANGELES, CALIFORNIA Citizenship U.S.
(City, State) (Country)
Post Office Address 7550 W. 80th ST
LOS ANGELES, CA 90045

-3 of 3-

DECLARATION OF POWER OF ATTORNEY



GAC/21;
SI
04-15

Please type a plus sign (+) inside this box →

PTO/SB/21 (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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<h2>TRANSMITTAL FORM</h2> <p><i>(to be used for all correspondence after initial filing)</i></p>	Application Number	09/659,987	
	Filing Date	September 12, 2000	
	First Named Inventor	Samuel GUSTMAN	
	Group Art Unit	2175	
	Examiner Name	Unassigned <i>mizud</i>	
Total Number of Pages in This Submission	4	Attorney Docket Number	84300.916

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers (for an Application)	<input type="checkbox"/> After Allowance Communication to Group
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment / Reply	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	-Return Receipt postcard
<input checked="" type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	RECEIVED
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	APR 12 2002
<input type="checkbox"/> Response to Missing Parts/ Incomplete Application	Remarks	Technology Center 2100
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	The Hecker Law Group By: Gary A. Hecker, Reg. No. 31,023
Signature	<i>[Handwritten Signature]</i>
Date	March 28, 2002

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: <input type="text" value="March 28, 2002"/>	
Typed or printed name	Deanna Blizzard
Signature	<i>[Handwritten Signature]</i> Date <input type="text" value="March 28, 2002"/>

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Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Application Number	09/659,987
		Filing Date	September 12, 2000
		First Named Inventor	Samuel GUSTMAN
		Art Unit	2175
		Examiner Name	Unassigned <i>Murchu</i>
Sheet	1	of	3
		Attorney Docket Number	84300.916

U.S. PATENT DOCUMENTS						
Examiner Initials ⁶	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
<i>DM</i>		US- 09/792,381		Filed 2/3/00	GUSTMAN	
		US- 09/788,310		Filed 2/16/01	GUSTMAN	
		US- 09/659,988		Filed 9/12/00	GUSTMAN	
		US- 0,212,527		4/3/01	GUSTMAN	
		US- 5,010,500		4/23/91	MAKKUNI, ET AL.	
		US- 5,119,474		6/2/92	BEITEL, ET AL.	
		US- 5,121,470		6/9/92	TRAUTMAN	
		US- 5,123,088		6/16/92	KASAHARA, ET AL.	
		US- 5/167,119		4/1/97	BRIGGS, ET AL.	
		US- 5,192,999		3/9/93	GRACZYK, ET AL.	
		US- 5,210,868		5/11/93	SHIMADA, ET AL.	
		US- 5,241,671		8/31/93	REED, ET AL.	
		US- 5,274,758		12/28/93	BEITEL, AT AL.	
		US- 5,278,946		1/11/94	SHIMADA, ET AL.	
		US- 5,280,573		1/18/94	KUGA, ET AL.	
		US- 5,283,638		2/1/94	ENGBERG, ET AL.	
		US- 5,283,819		2/1/94	GLICK, ET AL.	
	US- 5,297,249		3/22/94	BERNSTEIN, ETAL.		
	US- 5,303,296		4/12/94	ZUCKER		
	US- 5,307,456		4/26/94	MACAY		

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FOREIGN PATENT DOCUMENTS							
Examiner Initials ⁶	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			

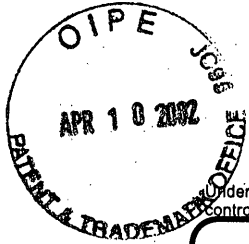
Examiner Signature	<i>Diane Murchu</i>	Date Considered	<i>9/7/02</i>
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check-mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

P1/3



PTO/SB/08A (10-01)
 Approved for use through 10/31/2002. OMB 0651-0031
 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
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Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Application Number	09/659,987
		Filing Date	September 12, 2000
		First Named Inventor	Samuel GUSTMAN
		Art Unit	2175
		Examiner Name	Unassigned <i>Mizubi</i>
Sheet	2	of	3
		Attorney Docket Number	84300.916

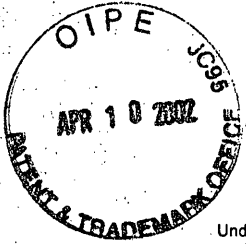
U.S. PATENT DOCUMENTS						
Examiner Initials [*]	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
<i>DM</i> ↓		US- 5,382,330		10/28/97	SEAMAN, ET AL.	RECEIVED APR 12 2002 Technology Center 2100
		US- 5,402,499		3/25/95	ROBINSON, ET AL.	
		US- 5,404,506		4/4/95	FUJISAWA, ET AL.	
		US- 5,408,665		4/18/95	OREN, ET AL.	
		US- 5,414,644		5/9/95	SEAMAN, ET AL.	
		US- 5,428,730		6/27/95	BAKER, ET AL.	
		US- 5,428,774		6/27/95	TAKAHASHI, ET AL.	
		US- 5,434,592		7/18/95	DINWIDDLE, JR. ET AL.	
		US- 5,436,898		7/25/95	BOWEN, ET AL.	
		US- 5,450,581		9/12/95	BERGEN, ET AL.	
		US- 5,461,611		10/24/95	DRAKE, JR. ET AL.	
		US- 5,493,677		2/20/96	BALOGH, ET AL.	
		US- 5,515,490		5/7/96	BUCHANAN, ET AL.	
		US- 5,530,852		6/25/96	MESKE, JR. ET AL.	
		US- 5,608,900		3/4/97	DOCKTER, ET AL.	
		US- 5,613,909		3/25/97	STELOVSKY	
		US- 5,615,112		3/25/97	LIU SHENG, ET AL.	
		US- 5,617,119		4/1/97	BRIGGS, ET AL.	
	US- 5,630,121		5/13/97	BRADEN-HARDER, ET AL.		
	US- 5,630,125		5/13/97	ZELLWEGER		

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Examiner Initials [*]	Cite No. ¹	Foreign Patent Document			Publication Date [*] MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear.
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Examiner Signature	<i>Diana Mizubi</i>	Date Considered	<i>9/12/02</i>
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p2/3



PTO/SB/08A (10-01)

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Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Application Number	09/659,987
		Filing Date	September 12, 2000
		First Named Inventor	Samuel GUSTMAN
		Art Unit	2175
		Examiner Name	Unassigned <i>Mizraln</i>
		Attorney Docket Number	84300.916
Sheet	3	of	3

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Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)				
<i>DM</i> ↓		US- 5,649,185		7/15/97	ANTONOGINI ET AL.	
		US- 5,649,186		7/15/97	FERGUSON	
		US- 5,682,330		10/28/97	SEAMAN, ET AL.	
		US- 5,724,605		3/3/98	WISSNER	
		US- 5,813,014		9/22/98	GUSTMAN	
		US- 5,832,495		11/3/98	GUSTMAN	
		US- 5,832,499		11/3/98	GUSTMAN	
		US- 5,867,709		2/2/99	LANG, ET AL.	
		US- 6,092,080		7/18/00	GUSTMAN	
		US- 6,199,060		3/6/01	GUSTMAN	
		US- 6,353,831		3/5/02	GUSTMAN	
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		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				

Examiner Signature	<i>Diane Mizraln</i>	Date Considered	<i>9/2/02</i>
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P3/3



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/659,987	09/12/2000	Samuel Gustman	84300.916	6340

22804 7590 09/11/2002

THE HECKER LAW GROUP
1925 CENTURY PARK EAST
SUITE 2300
LOS ANGELES, CA 90067

EXAMINER

MIZRAHI, DIANE D


ART UNIT	PAPER NUMBER
2175	6

DATE MAILED: 09/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 09/659,987	Applicant(s) Samuel GUSTMAN et al.
Examiner MIZRAHI	Art Unit 2175



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on Sep 12, 2000
- 2a) This action is FINAL.
- 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-26 is/are pending in the application.
4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-26 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some* c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5
- 4) Interview Summary (PTO-413) Paper No(s). _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other:

Art Unit: 2175

III. DETAILED ACTION

1. Claims 1-26 are presented for examination.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321[©] may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-26 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,212,527 B1.

Although the conflicting claims are not identical, they are not patentably distinct from each other because they are substantially similar in scope and they use the same limitations, using varying terminology.

Art Unit: 2175

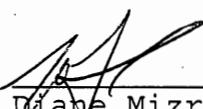
Points of Contact

4. Any inquiry concerning this communications from the examiner should be directed to Diane Mizrahi whose telephone number is (703) 305-3806. The examiner can normally be reached on Monday to Thursday from 7:30 AM. to 5:00 PM.

If any attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Dov Popovici can be reached on (703) 305-3830.

Any response to this office action should be mailed to The Commissioner of Patents and Trademarks, Washington, D.C. 20231 or telefaxed at our phone number (703) 746-5612.

For formal or draft communications, please label "PROPOSED" or "DRAFT". Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, 4th Floor Receptionist, Arlington, Virginia.



Diane Mizrahi
Primary Patent Examiner

Technology Center 2100

September 8, 2002

Notice of References Cited	Application/Control No. 09/659,987	Applicant(s)/Patent Under Reexam Samuel GUSTMAN et al.	
	Examiner MIZRAHI	Art Unit 2175	Page 1 of 1

U.S. PATENT DOCUMENTS

	Document Number Country Code-Number-Kind Code	Date MM-YYYY ¹	Name	Classification ²	
A	6,212,527 B1	4/2001	Gustman	707	102
B	5,813,014	9/1998	Gustman	707	103
C	5,832,495	11/1998	Gustman	707	102
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					

FOREIGN PATENT DOCUMENTS

	Document Number Country Code-Number-Kind Code	Date MM-YYYY ¹	Country	Name	Classification ²	
N						
O						
P						
Q						
R						
S						
T						

NON-PATENT DOCUMENTS

	Include, as applicable: Author, Title, Date, Publisher, Edition or Volume, Pertinent Pages
U	
V	
W	
X	

* A copy of this reference is not being furnished with this Office action. See MPEP § 707.05(a). ¹ Dates in MM-YYYY format are publication dates. ² Classifications may be U.S. or foreign.



#2175

Please type a plus sign (+) inside this box →

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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<h1>TRANSMITTAL FORM</h1> <p>(to be used for all correspondence after initial filing)</p>	Application Number	09/659,987	
	Filing Date	September 12, 2000	
	First Named Inventor	Samuel Gustman	
	Group Art Unit	2175	
	Examiner Name	Diane D. Mizrahi	
Total Number of Pages in This Submission	6	Attorney Docket Number	84300.916

ENCLOSURES (check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input checked="" type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): -Return Receipt postcard
Remarks		

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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	The Hecker Law Group By: Gary A. Hecker Reg. No. 31,023
Signature	
Date	December 6, 2002

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: 12/06/2002	
Typed or printed name	Deanna Blizzard
Signature	
Date	December 6, 2002

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FEE TRANSMITTAL for FY 2001	Complete if Known
<i>Patent fees are subject to annual revision.</i>	Application Number: 09/659,987
	Filing Date: September 12, 2000
	First Named Inventor: Samuel Gustman
	Examiner Name: Diane D. Mizrahi
	Group Art Unit: 2175
	Attorney Docket No.: 84300.916
TOTAL AMOUNT OF PAYMENT	(\$) 55.00

<p>METHOD OF PAYMENT</p> <p>1. <input type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:</p> <p>Deposit Account Number: _____ Deposit Account Name: _____</p> <p><input type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17. <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.</p> <p>2. <input checked="" type="checkbox"/> Payment Enclosed: <input checked="" type="checkbox"/> Check <input type="checkbox"/> Credit card <input type="checkbox"/> Money Order <input type="checkbox"/> Other</p> <p style="text-align: center;">FEE CALCULATION</p> <p>1. BASIC FILING FEE</p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Large Entity Code (\$)</th> <th>Small Entity Code (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>101 710</td><td>201 355</td><td>Utility filing fee</td><td></td></tr> <tr><td>106 320</td><td>206 160</td><td>Design filing fee</td><td></td></tr> <tr><td>107 490</td><td>207 245</td><td>Plant filing fee</td><td></td></tr> <tr><td>108 710</td><td>208 355</td><td>Reissue filing fee</td><td></td></tr> <tr><td>114 150</td><td>214 75</td><td>Provisional filing fee</td><td></td></tr> <tr><td colspan="3" style="text-align: right;">SUBTOTAL (1)</td><td>(\$)</td></tr> </tbody> </table> <p>2. EXTRA CLAIM FEES</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td>Total Claims</td> <td>_____</td> <td>-20** =</td> <td>_____</td> <td>X</td> <td>_____</td> <td>=</td> <td>_____</td> </tr> <tr> <td>Independent Claims</td> <td>_____</td> <td>-3** =</td> <td>_____</td> <td>X</td> <td>_____</td> <td>=</td> <td>_____</td> </tr> <tr> <td>Multiple Dependent</td> <td>_____</td> <td></td> <td>_____</td> <td></td> <td>_____</td> <td>=</td> <td>_____</td> </tr> </table> <p>Large Entity Small Entity</p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Fee Code (\$)</th> <th>Fee Code (\$)</th> <th>Fee Code (\$)</th> <th>Fee Code (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>103 18</td><td>203 9</td><td>102 80</td><td>202 40</td><td>Claims in excess of 20</td><td></td></tr> <tr><td>104 270</td><td>204 135</td><td>109 80</td><td>209 40</td><td>Independent claims in excess of 3</td><td></td></tr> <tr><td>109 80</td><td>209 40</td><td>110 18</td><td>210 9</td><td>Multiple dependent claim, if not paid</td><td></td></tr> <tr><td>110 18</td><td>210 9</td><td></td><td></td><td>** Reissue independent claims over original patent</td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td>** Reissue claims in excess of 20 and over original patent</td><td></td></tr> <tr><td colspan="5" style="text-align: right;">SUBTOTAL (2)</td><td>(\$)</td></tr> </tbody> </table> <p><small>**or number previously paid, if greater; For Reissues, see above</small></p>	Large Entity Code (\$)	Small Entity Code (\$)	Fee Description	Fee Paid	101 710	201 355	Utility filing fee		106 320	206 160	Design filing fee		107 490	207 245	Plant filing fee		108 710	208 355	Reissue filing fee		114 150	214 75	Provisional filing fee		SUBTOTAL (1)			(\$)	Total Claims	_____	-20** =	_____	X	_____	=	_____	Independent Claims	_____	-3** =	_____	X	_____	=	_____	Multiple Dependent	_____		_____		_____	=	_____	Fee Code (\$)	Fee Code (\$)	Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid	103 18	203 9	102 80	202 40	Claims in excess of 20		104 270	204 135	109 80	209 40	Independent claims in excess of 3		109 80	209 40	110 18	210 9	Multiple dependent claim, if not paid		110 18	210 9			** Reissue independent claims over original patent						** Reissue claims in excess of 20 and over original patent		SUBTOTAL (2)					(\$)	<p>3. 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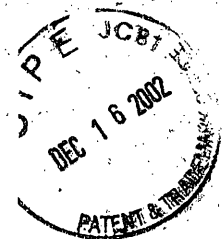
DEC 19 2002

Technology Center 2100

SUBMITTED BY		<i>Complete (if applicable)</i>	
Name (Print/Type)	Gary A. Hecker	Registration No. (Attorney/Agent)	31,023
Signature		Telephone	(310) 286-0377
		Date	December 6, 2002

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#17
12/29/02
AW

84300.916

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of)	
SAMUEL GUSTMAN)	Examiner: DIANE D. MIZRAHI
Serial No. 09/659,987)	Group Art Unit: 2175
Filed: September 12, 2000)	
For: METHOD AND APPARATUS)	
FOR CATALOGUING)	
MULTIMEDIA DATA USING)	
<u>SURVEYING DATA</u>)	

AMENDMENT AND RESPONSE

Assistant Commissioner for Patents
Washington, D. C. 20231

Dear Sir:

This is in response to the outstanding Examiner's Action dated September 11, 2002 (paper number 6). Please consider the following remarks.

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84300.916

1

REMARKS

Claims 1-26 are pending in the present patent application. The Examiner has rejected claims 1-26.

I. Double Patenting

The Examiner has rejected claims 1-26 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. Patent No. 6,212,527 B1. The Examiner states:

1. The non-statutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73 (b).

2. Claims 1-26 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,212,527 B1.

Although the conflicting claims are not identical, they are not patentably distinct from each other because they are substantially similar in scope and they use the same limitations, using varying terminology.

With this response, Applicant encloses a terminal disclaimer in compliance with 37 CFR §321(c) to overcome the Examiner's double patenting rejection.

CONCLUSION

Applicant respectfully submits that claims 1-26 are allowable and therefore respectfully requests that pending claims 1-26 be placed in condition for allowance.

Respectfully submitted,

THE HECKER LAW GROUP

Date: December 6, 2002

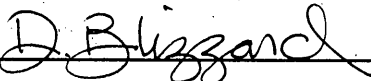
By: 

Gary A. Hecker
Reg. No. 31,023

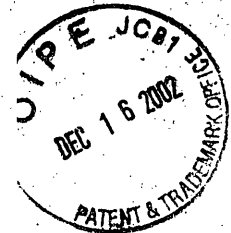
THE HECKER LAW GROUP
1925 Century Park East
Suite 2300
Los Angeles, California 90067
(310) 286-0377

CERTIFICATE OF MAILING

This is to certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231 on December 6, 2002.

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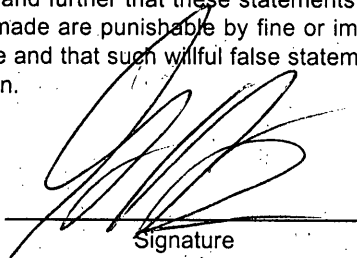
Signature: Deanna Blizzard Date: December 6, 2002



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Terminal
Discl
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PTO/SB/26 (10-00)
Approved for use 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TERMINAL DISCLAIMER TO OBIATE A DOUBLE PATENTING REJECTION OVER A PRIOR PATENT	Docket Number (Optional) 84300.916
<p>In re Application of: Samuel Gustman Application No.: 09/659,987 Filed: September 12, 2000 For: Method and Apparatus for Cataloguing Multimedia Data Using Surveying Data</p> <p style="text-align: center;">Survivors of the Shoah</p> <p>The owner*, <u>Visual History Foundation</u>, of <u>100</u> percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application, which would extend beyond the expiration date of the full statutory term defined in 35 U.S.C. 154 to 156 and 173, as presently shortened by any terminal disclaimer, of prior Patent No. <u>6,212,527 B1</u>. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the prior patent are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.</p> <p>In making the above disclaimer, the owner does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. 154 to 156 and 173 of the prior patent, as presently shortened by any terminal disclaimer, in the event that it later: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321, has all claims canceled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.</p> <p>Check either box 1 or 2 below, if appropriate.</p> <p>1. <input type="checkbox"/> For submissions on behalf of an organization (e.g., corporation, partnership, university, government agency, etc.), the undersigned is empowered to act on behalf of the organization.</p> <p>I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.</p> <p>2. <input checked="" type="checkbox"/> The undersigned is an attorney or agent of record.</p> <div style="text-align: right; margin-right: 100px;">  Signature </div> <div style="text-align: right; margin-right: 100px;"> <u>12/06/2002</u> Date </div> <div style="text-align: center; margin-top: 10px;"> <u>Gary A. Hecker</u> Typed or printed name </div> <p><input checked="" type="checkbox"/> Terminal disclaimer fee under 37 CFR 1.20(d) included.</p> <p style="text-align: center;">WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.</p> <p><small>*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner). Form PTO/SB/96 may be used for making this certification. See MPEP § 324.</small></p>	

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system records at www.uspto.gov

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Notice of Allowability

Application No.	09/659,987	Applicant(s)	GUSTMAN ET AL.
Examiner	DIANE D. MIZRAHI	Art Unit	2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to 12-16-02.
- 2. The allowed claim(s) is/are 1-26.
- 3. The drawings filed on 9-12-00 are accepted by the Examiner.
- 4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

- 5. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) The translation of the foreign language provisional application has been received.
- 6. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

- 7. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 8. CORRECTED DRAWINGS must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No. _____
 - (b) including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

- 9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1 Notice of References Cited (PTO-892)
- 2 Notice of Informal Patent Application (PTO-152)
- 3 Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 4 Interview Summary (PTO-413), Paper No. _____
- 5 Information Disclosure Statements (PTO-1449), Paper No. _____
- 6 Examiner's Amendment/Comment
- 7 Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 8 Examiner's Statement of Reasons for Allowance
- 9 Other

DIANE D. MIZRAHI
DIANE D. MIZRAHI
PRIMARY PATENT EXAMINER
TECHNOLOGY CENTER 2100



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

22804 7590 12/27/2002
THE HECKER LAW GROUP
1925 CENTURY PARK EAST
SUITE 2300
LOS ANGELES, CA 90067

Table with 2 columns: EXAMINER (MIZRAHI, DIANE D), ART UNIT (2175), CLASS-SUBCLASS (707-001000)

DATE MAILED: 12/27/2002

Table with 5 columns: APPLICATION NO. (09/659,987), FILING DATE (09/12/2000), FIRST NAMED INVENTOR (Samuel Gustman), ATTORNEY DOCKET NO. (84300.916), CONFIRMATION NO. (6340)

TITLE OF INVENTION: METHOD AND APPARATUS FOR CATALOGUING MULTIMEDIA DATA USING SURVEYING DATA

Table with 6 columns: APPLN. TYPE (nonprovisional), SMALL ENTITY (NO), ISSUE FEE (\$1280), PUBLICATION FEE (\$0), TOTAL FEE(S) DUE (\$1280), DATE DUE (03/27/2003)

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
[] Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE
 Commissioner for Patents
 Washington, D.C. 20231
Fax (703)746-4000**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

22804 7590 12/27/2002

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 SUITE 2300
 LOS ANGELES, CA 90067

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below.

_____ (Depositor's name)
_____ (Signature)
_____ (Date)

APPLICATION NO. 09/659,987	FILING DATE 09/12/2000	FIRST NAMED INVENTOR Samuel Gustman	ATTORNEY DOCKET NO. 84300.916	CONFIRMATION NO. 6340
-------------------------------	---------------------------	--	----------------------------------	--------------------------

TITLE OF INVENTION: METHOD AND APPARATUS FOR CATALOGUING MULTIMEDIA DATA USING SURVEYING DATA

APPLN. TYPE nonprovisional	SMALL ENTITY NO	ISSUE FEE \$1280	PUBLICATION FEE \$0	TOTAL FEE(S) DUE \$1280	DATE DUE 03/27/2003
-------------------------------	--------------------	---------------------	------------------------	----------------------------	------------------------

EXAMINER MIZRAHI, DIANE D	ART UNIT 2175	CLASS-SUBCLASS 707-001000
------------------------------	------------------	------------------------------

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). <input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. <input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 1 _____ 2 _____ 3 _____
---	--

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE _____ (B) RESIDENCE: (CITY and STATE OR COUNTRY) _____

Please check the appropriate assignee category or categories (will not be printed on the patent) individual corporation or other private group entity government

4a. The following fee(s) are enclosed: <input type="checkbox"/> Issue Fee <input type="checkbox"/> Publication Fee <input type="checkbox"/> Advance Order - # of Copies _____	4b. Payment of Fee(s): <input type="checkbox"/> A check in the amount of the fee(s) is enclosed. <input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached. <input type="checkbox"/> The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form):
--	--

Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

(Authorized Signature) _____	(Date) _____
NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.	

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY-DOCKET NO.	CONFIRMATION NO.
09/659,987	09/12/2000	Samuel Gustman	84300.916	6340
22804	7590	12/27/2002	EXAMINER	
THE HECKER LAW GROUP 1925 CENTURY PARK EAST SUITE 2300 LOS ANGELES, CA 90067			MIZRAHI, DIANE D	
			ART UNIT	PAPER NUMBER
			2175	

DATE MAILED: 12/27/2002

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The patent term adjustment to date is 298 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 298 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (<http://pair.uspto.gov>)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



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UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/659,987	09/12/2000	Samuel Gustman	84300.916	6340

22804 7590 12/27/2002
THE HECKER LAW GROUP
1925 CENTURY PARK EAST
SUITE 2300
LOS ANGELES, CA 90067
UNITED STATES

EXAMINER

MIZRAHI, DIANE D

ART UNIT	PAPER NUMBER
2175	

2175

DATE MAILED: 12/27/2002

Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: <http://www.uspto.gov/main/howtofees.htm>.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

Transaction History Date 2003-03-31

Date information retrieved from USPTO Patent Application Information Retrieval (PAIR) system records at www.uspto.gov

PART B - FEE(S) TRANSMITTAL

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CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)
22804 7590 12/27/2002

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LOS ANGELES, CA 90067

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Mario Federis (Depositor's name)
(Signature)
March 24, 2003 (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/659,987	09/12/2000	Samuel Gutzman	84300.916	6340

TITLE OF INVENTION: METHOD AND APPARATUS FOR CATALOGUING MULTIMEDIA DATA USING SURVEYING DATA

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1280	\$0	\$1280	03/27/2003

EXAMINER	ART UNIT	CLASS-SUBCLASS
MIZRAHI, DIANE D	2175	707-001000

- 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
 Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
 "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.
- 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 The Hecker Law Group
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)
PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.
(A) NAME OF ASSIGNEE: Survivors of the Shoah Visual History Foundation
(B) RESIDENCE: (CITY and STATE OR COUNTRY) Los Angeles, California

Please check the appropriate assignee category or categories (will not be printed on the patent) individual corporation or other private group entity government

- 4a. The following fee(s) are enclosed:
 Issue Fee
 Publication Fee
 Advance Order - # of Copies 10 copies
- 4b. Payment of Fee(s):
 A check in the amount of the fee(s) is enclosed.
 Payment by credit card. Form PTO-2038 is attached.
 The Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number 08-1520 (enclose an extra copy of this form).

Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.
Gary A. Hecker 3-24-03
(Authorized Signature) (Date)

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.
This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.
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01 FC:2501 650.00 89
02 FC:0001 30.00 89

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B Kam JC

Atty. Docket No. 84300.916

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

of the Application of)
GUSTMAN, Samuel)
Serial No: 09/659,987)
Filed: September 12, 2000)
For: METHOD AND APPARATUS)
FOR CATALOGUING)
MULTIMEDIA DATA)

Examiner: Diane D. Mizrahi

Group Art Unit: 2175

SUBMITTAL OF FORMAL DRAWINGS

BOX ISSUE FEE (DRAWINGS)
Commissioner for Patents
Washington, D. C. 20231.

Sir:

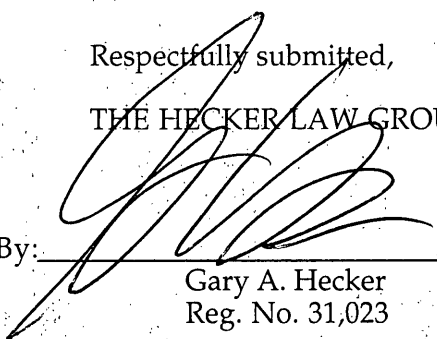
This is in response to the Notice of Allowance dated December 27, 2002. Applicant has enclosed the following:

- 1. Thirty Two (22) sheets of formal drawings;
- 2. A Certificate of Mailing by FIRST CLASS Mail; and
- 3. A return receipt postcard.

The Commissioner is hereby authorized to charge any fees associated with this communication to The Hecker Law Group Deposit Account No. 08-1520. A duplicate copy of this transmittal letter is enclosed for this purpose.

Respectfully submitted,
THE HECKER LAW GROUP

Date: 3-24-03

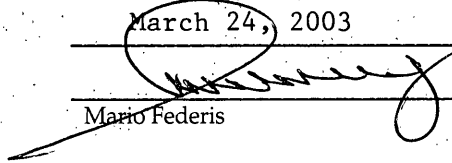
By: 
Gary A. Hecker
Reg. No. 31,023

THE HECKER LAW GROUP
1925 Century Park East, Suite 2300
Los Angeles, CA 90067
(310) 286-0377

CERTIFICATE OF MAILING

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March 24, 2003


Mario Federis

03/24/03
Date



Atty. Docket No. 84300.916

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of)
GUSTMAN, Samuel)
Serial No: 09/659,987)
Filed: September 12, 2000)
For: METHOD AND APPARATUS)
FOR CATALOGUING)
MULTIMEDIA DATA.....)

Examiner: Diane D. Mizrahi
Group Art Unit: 2175

SUBMITTAL OF FORMAL DRAWINGS

BOX ISSUE FEE (DRAWINGS)
Commissioner for Patents
Washington, D. C. 20231

Sir:

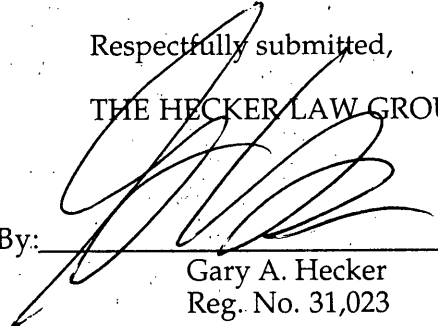
This is in response to the Notice of Allowance dated December 27, 2002. Applicant has enclosed the following:

- 1. Thirty Two (22) sheets of formal drawings;
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Respectfully submitted,
THE HECKER LAW GROUP

Date: 3-24-03

By: 
Gary A. Hecker
Reg. No. 31,023

THE HECKER LAW GROUP
1925 Century Park East, Suite 2300
Los Angeles, CA 90067
(310) 286-0377

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This is to certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as FIRST CLASS Mail in an envelope addressed to: BOX ISSUE FEE (DRAWINGS), Commissioner for Patents, Washington, D. C., 20231 on :

March 24, 2003


Mario Federis

03/24/03
Date

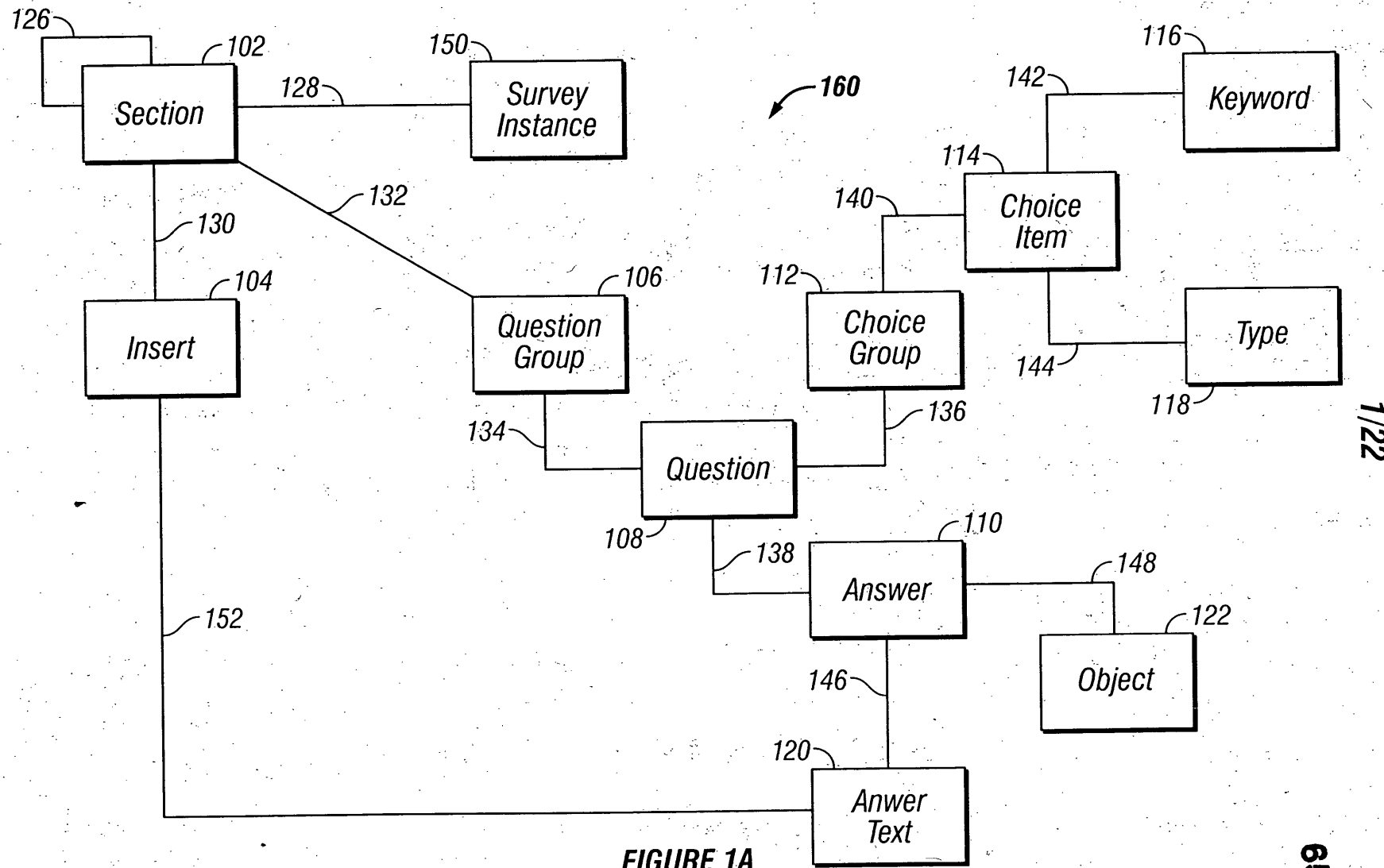


FIGURE 1A

1/22

6574638

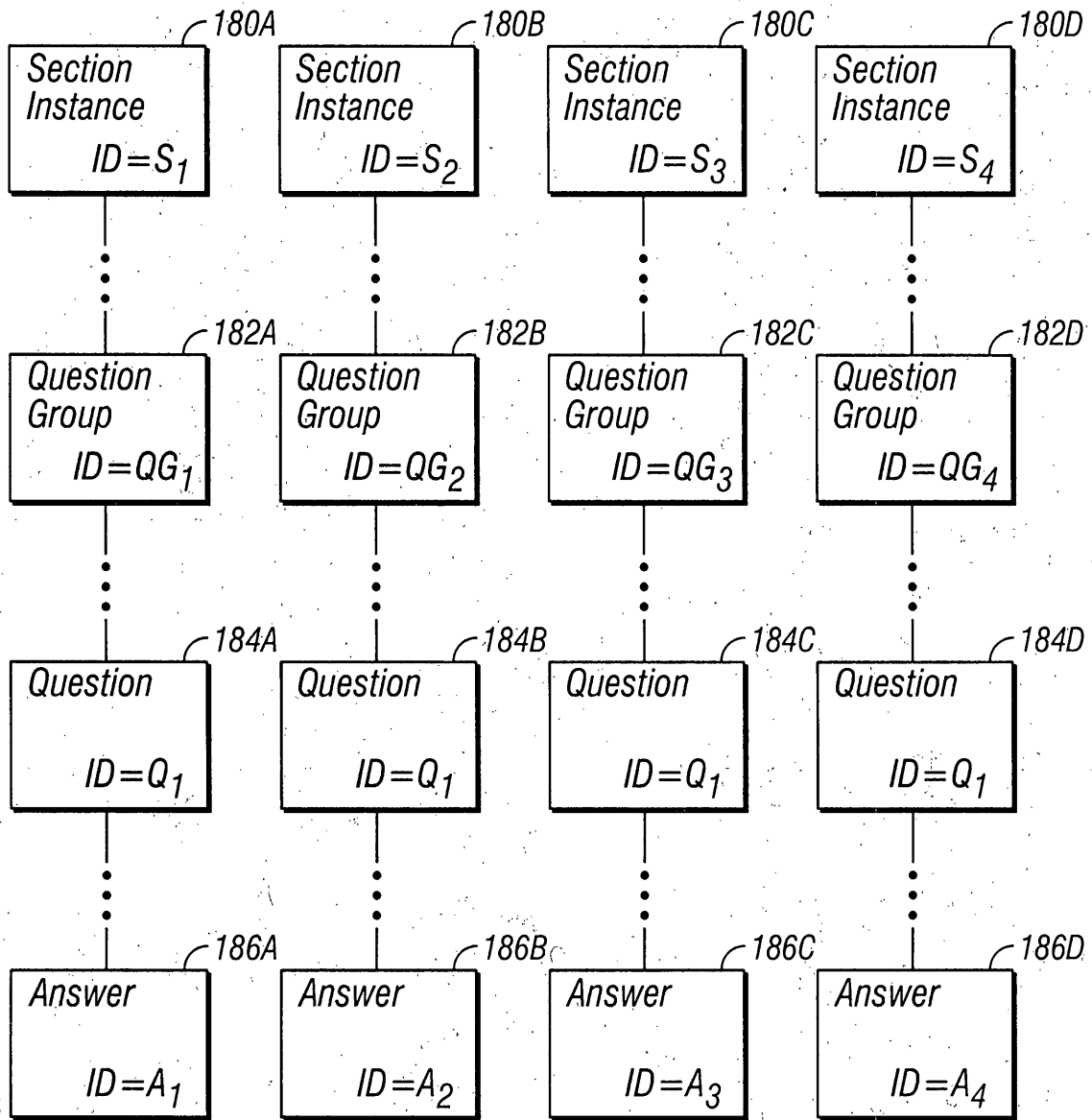


FIGURE 1B

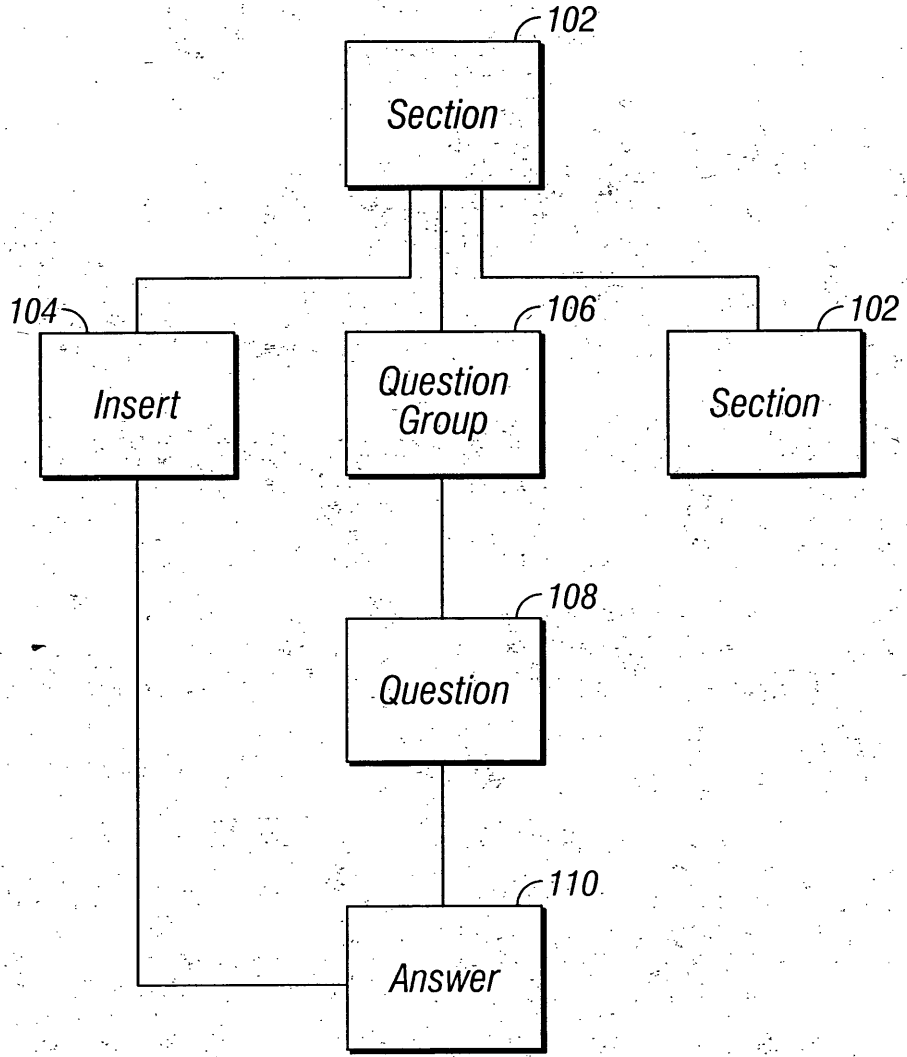
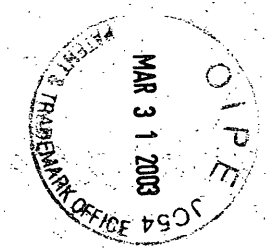


FIGURE 1C

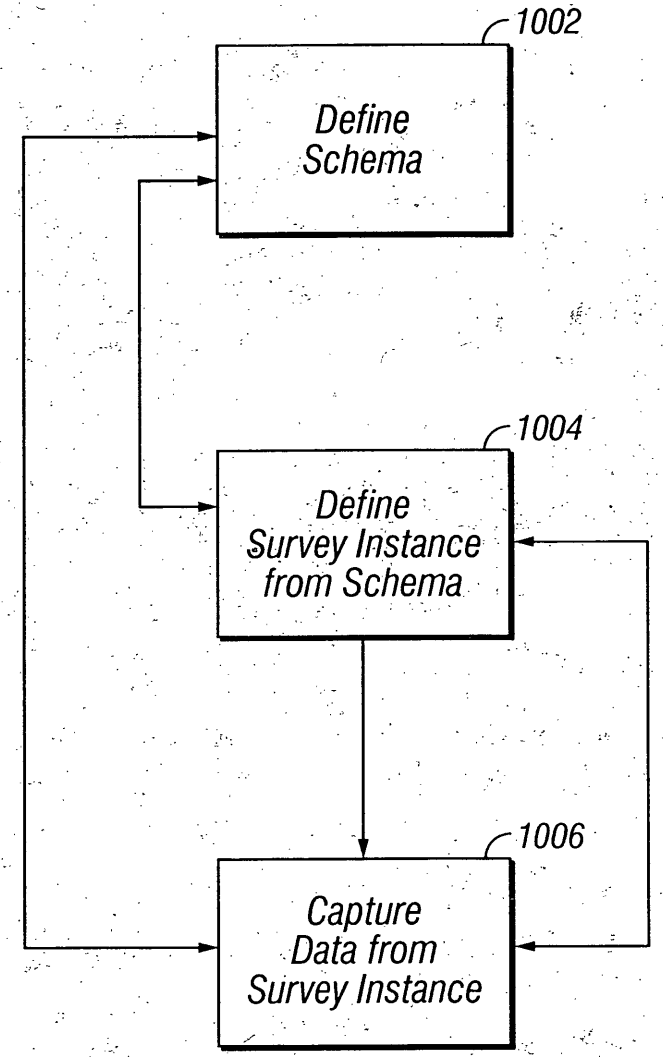
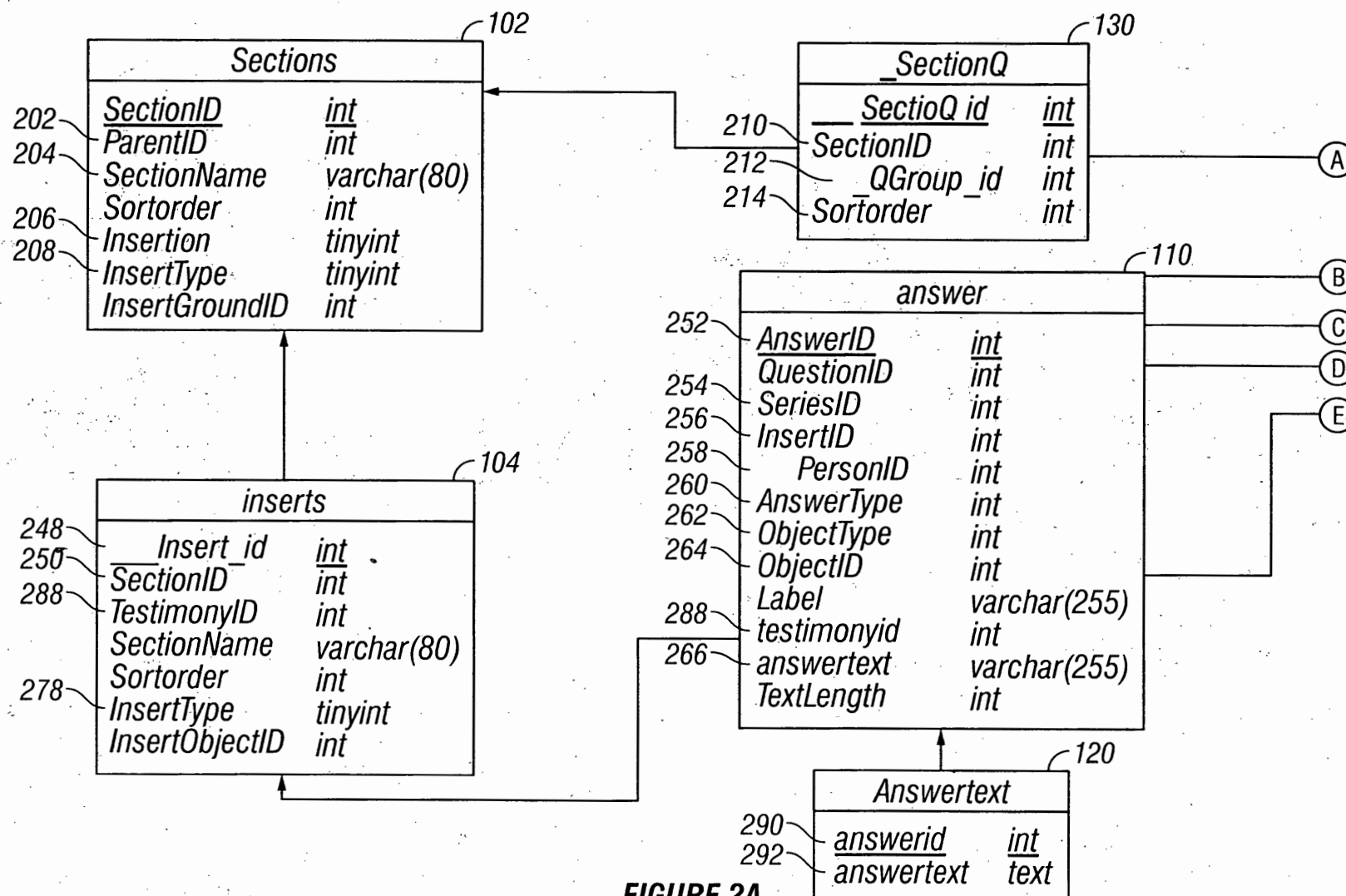


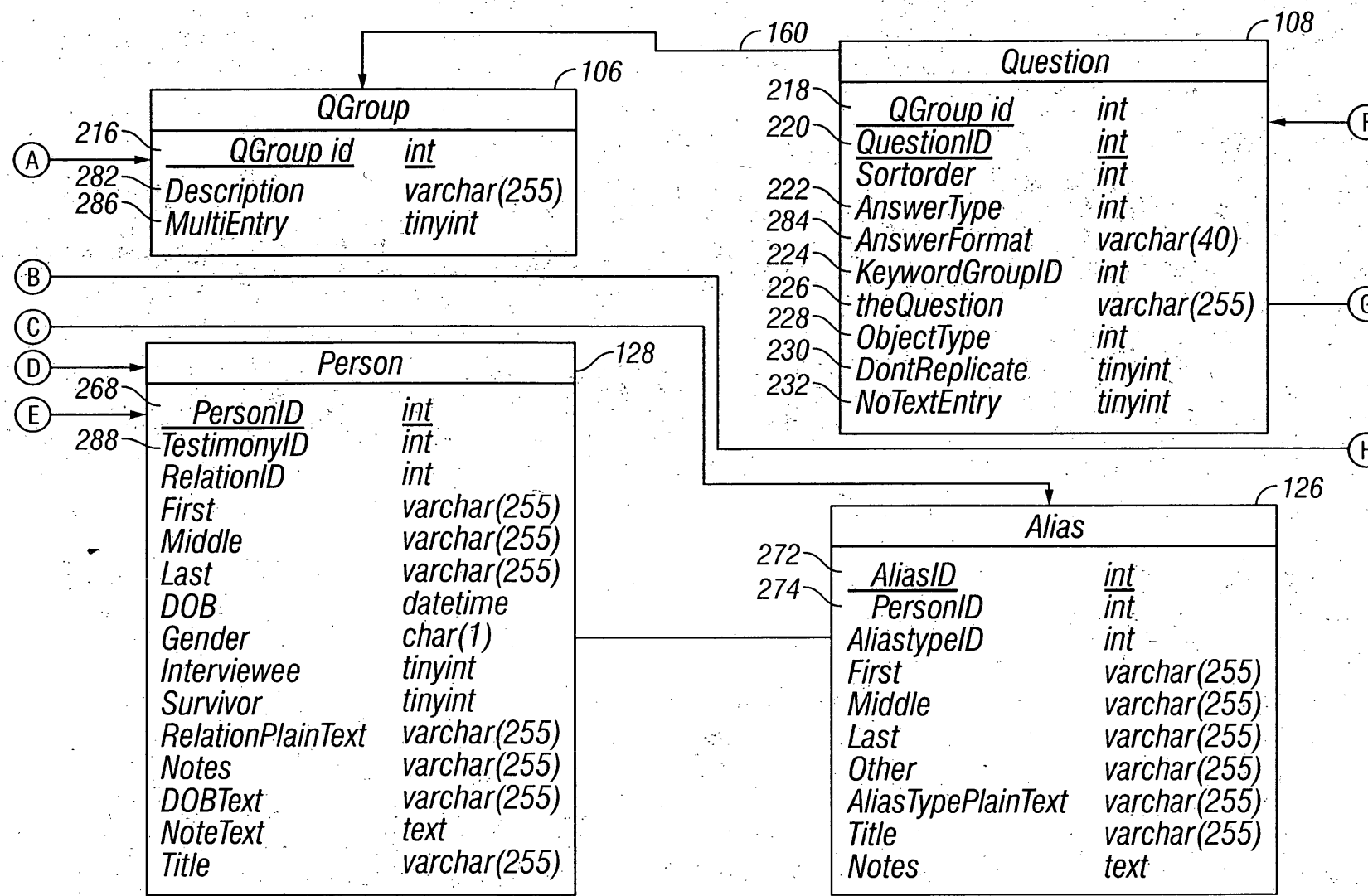
FIGURE 10

3/22



4/22

FIGURE 2A



5/22

FIGURE 2B

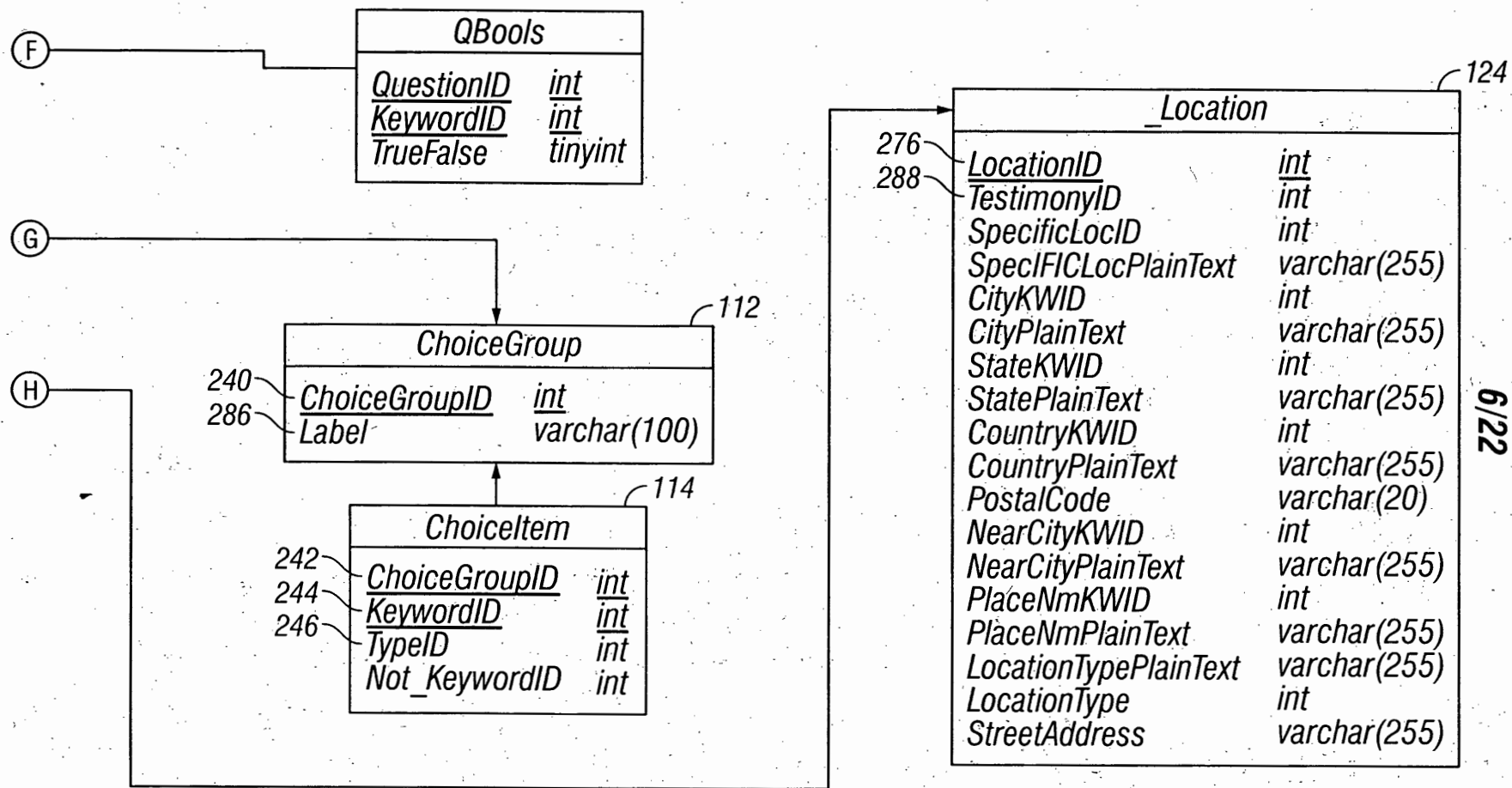


FIGURE 2C

PATENT & TRADEMARK OFFICE
 MAR 3 1 2003
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 JCS4

The interface is divided into three main areas:

- 306 (Left Sidebar):** A tree view showing sections. The selected section is "Attend synagogue or church". Other sections include "1. PIQ Entry Details", "2. Front Page", "3. General Interview Detail", "4. Interviewee Information", "5. Prewar Life", "6. Wartime", "7. Postwar", "8. Family / People in This", "9. Family Identity", "10. Post-Interviewer Information", "11. Interviewer information", "12. Notes", "13. Rescue and Aid Insert", "14. War Crime Insert", "15. Liberation Insert Section", "xxx Non-Catalogueable PIQ", and "Unused Questions...".
- 302 (Main Table):** A table titled "Currently Selected Question Group..." showing details for the selected question group "Attend synagogue or church".

318 (Answer Type)	320 (Question Text)	322 (Format)	324 (Keyword Group)	326 (Object Type)	328 (Don't Replicate)
Boolean	Did your family attend a synagogue or church?	Yes;No		PIQ...Location	Don't Repl
Plain Text	If so, how often?			PIQ...Person	
Object	Name and Location of synagogue, church, etc.		Religious Leaders		
Object	Name of synagogue or church leader?				
Single Select.	Position Title? (Rabbi, priest, reverend, etc)				
- 330-336 (Bottom Toolbar):** A set of buttons for managing the interface: "Add Section" (330), "Delete Section" (332), "Add Question Group" (334), "Delete Question Group" (336), "Collapse All", "Export", "Merge", and "Done".

FIGURE 3



8/22

A screenshot of a software dialog box titled "ADD SECTION". The dialog box has a title bar with the text "ADD SECTION" (402). Below the title bar, there is a "Parent Section" dropdown menu (404) and a "Section Name" text input field (406). Below these, there is a checkbox labeled "Insert" (412). Underneath the checkbox is an "Insert Type" dropdown menu (408) which is currently expanded to show two options. At the bottom of the dialog box are two buttons: "Cancel" and "Save" (410).

FIGURE 4A

A screenshot of a software dialog box titled "ADD QUESTION GROUP". The dialog box has a title bar with the text "ADD QUESTION GROUP" (422). Below the title bar, there is a "Parent Section" dropdown menu (424) and a "Group Title" text input field (426). Below these, there is a checkbox labeled "Multi-Entry" (430). At the bottom of the dialog box are two buttons: "Cancel" and "Save" (428).

FIGURE 4B

Sections...

- ▷ 1. PIQ Entry Details
- ▷ 2. Front Page
- ▷ 3. General Interview Detail
- ▷ 4. Interviewee Information
- ▼ 5. Prewar Life
 - Prewar Addresses
 - Household members (extended)
 - Organizational Affiliation
 - Activities & Interests
 - Attend synagogue or church
- ▷ 6. Wartime
- ▷ 7. Postwar
- ▷ 8. Family / People in This Testimony
- ▷ 9. Family Identity
- ▷ 10. Post-Interview Information
- ▷ 11. Interviewer Information
- ▷ 12. Notes
- ▷ 13. Rescue and Aid Information
- ▷ 14. War Crime Trials
- ▷ 15. Liberation Insert Sheet
- ▷ xxx Non-Catalogueable
- ▷ Unused Questions...

Currently Selected Question Group...

Attend synagogue or church

Answer Type	Question Text	Format	Keyword Group	Object-Type	Don't Replicate
Boolean	Did your family attend a synagogue or church?	Yes/No			Don't Repl
Plain Text	If so, how often?			PIQ...Location	
Object	Name and Location of synagogue, church, etc.			PIQ...Person	
Object	Name of synagogue or church leader?				
Single Select	Position Title? (Rabbi, priest, reverend, etc)		Religious Leaders		

Edit Question...

Question Text:

Answer Type:

- Plain Text
- Boolean
- Date
- Single Select
- Multi Select
- Object

Relation Type:

Question Group: *Attend synagogue or church*

Don't Replicate:

PIQ_Person

Add Section

Delete Section

Coll

Done

Cancel Save

9/22

FIGURE 5

Choice Groups

ID	Choice Groups
18	Alias Types
19	Alias Types - Mandatory
173	Arrived from? (ML)
247	Attributes and Roles
242	Camps (cc, pow, intern)
164	Camps (ML)
163	Children (ML)
238	Circumstances of release
2	Cities, towns, villages, shtetls

604

Drag from Keyword Authority to Admin Choices

606

When a Keyword is dragged, the Keyword will be added to both "Admin Choices" and "User View".

When a Type is dragged, the Type is displayed in "Admin Choices" and the current keywords of that Type are added to "User View".

If an inappropriate keyword appears in "User View" from dragging a Type, it may be excluded by dragging it to the trash: This allows the user to create a list of exceptions to a desired Type.

602

610

608

Item	Source
(PIQ) post-liberation con. camps	Type
Jasenovac (Yugoslavia : Camp)	Type
camps in Yugoslavia (CONTAINER ONL)	Type
prisoner of war camps	Type
Stalag IV G, Oschatz (Germany : POW)	Type
Kulmhof (Poland : Camp)	Type
Sobibor (Poland : Camp)	Type
Auschwitz II-Birkenau (Poland : Camp)	Type
Treblinka II (Poland : Camp)	Type
Belzec II (Poland : Camp)	Type
SS mobil construction brigades	KW
concentration camps, Slovak	Type
Balf (Hungary : Camp)	Type
Csepel (Hungary : Camp)	Type
Hajduhadhaz (Hungary : Camp)	Type
Koeszeg (Hungary : Camp)	Type

612

614

Choice	Source
concentration camps	type
NOT (z)Brauweiler (Germany: Camp)	Type
NOT (z)Breitenau (1933-1934) (Ger	Type
NOT (z)Breslau-Dürrgoy (Germany :	Type
NOT (z)Bürgermoor (Germany : Cam	Type
NOT (z)Chemnitz (Germany : Camp)	Type
NOT (z)Colditz (1933-1934) (Germa	Type
NOT (z)Columbia-Haus (Germany :Ca	Type
NOT (z)Dresden-Trachenberg (Germ	Type
NOT (z)Gollnow (Germany : Camp)	Type
NOT (z)Hammerstein (Germany : Cam	Type
NOT (z)Heuberg (Germany : Camp)	Type
NOT (z)Hohnstein (Germany : Camp)	Type
NOT (z)Langlütjen (Germany : Camp)	Type
NOT (z)Lichtenburg (Germany : Camp	Type
NOT (z)Ochtumsand (Germany : Camp	Type

616

Keyword Authority	
Keyword	Type
> academic life (CONTAINER ON	Miscellaneous
> cultural and social life (CONT	cultural and so
> discrimination and intoleranc	Miscellaneous
> economic life (CONTAINER ON	Miscellaneous
> family life	family life
> food and eating (CONTAINER O	Food and Drink
> forced labor experience CON	Miscellaneous
> government and political life	Miscellaneous
> health and health services (C	Miscellaneous
> hiding	hiding
> incarceration (CONTAINER ON	Miscellaneous
> Jewish life (CONTAINER ONL	Miscellaneous

618

Cancel Save

10/22

FIGURE 6

O I P E
 MAR 31 2003
 JCS4
 MARK OFFICE

Testimony.IntCode : 232
 Interviewee : Sigi Hart

Sections
 Find Reset

- 1. PIQ Entry Details
- 2. Front Page
- 3. General Interview Detail
- 4. Interviewee information
- 5. Prewar Life
 - Prewar Addresses
 - Household members (ext)
 - Organizational Affiliation
 - Activities & Interests
 - Attend synagogue or church
- 6. Wartime
- 7. Postwar
- 8. Family / People in This Te
- 9. Family Identity
- 10. Post-Interviewer Informa
- 11. Interviewer information
- 12. Notes
- 13. Rescue and Aid Insert
- 14. War Crime Trials
- 15. Liberation Insert Section
- xxx Non-Catalogueable PIQ

Keywords

PIQ Choices

Keyword :

- Aleksander Rebbes
- Baal Koreh
- Baal Tefilla
- Belzer Rebbes
- cantors
- Hager, Rabbi Menahem Mendel
- Halberstam, Rabbi Yekutiel Juda
- Lubavitcher Rebbes
- minister
- occupations, gabbaim

Add PIQPerson Object

5. Prewar Life : Name of synagogue or church leader? (PIQPerson)

Relation to Interviewee: brothers 704

First
 Middle
 Last
 Title

Date of Birth

Gender Male Female Unspecified

Survivor Yes No Unspecified 708

Notes About This Person

Instructions : 1) Double-click to start data entry. 2) 'Alias Type' is REQUIRED to save an Alias record.

Aliases...

Alias Type	First	Middle	Last	Title
release name				
release maiden name				
current name				
name at birth				
last name during war				
Hebrew name				
Yiddish name				
maiden name				
nickname				

Paste Name <- Highlight a line, then Use this button to paste the PIQ Person's name on the line.

Cancel OK

702
 706
 710

xT Answer

11/22

FIGURE 7

O I P E
 MAR 3 1 2003
 JCS4
 MARK OFFICE

Testimony IntCode : 232
Interviewee : Sigi Hart

Spreadsheet... OK

Sections Collapse All Selected Question Group

Find Reset

Name of Interviewee

Question	Answer
3. General Interview Details: Release Name of interviewee (as appears on Release Form) (PIQAlias)	802
Alias for : Sigi Hart	804
First Sigi	806
Middle	
Last Hart	
Title	808
Alias Type release name	810
Notes About This Alias	Plain Text Answer

NOTE : 'Alias Type' is REQUIRED in order to save the record

Paste Name Cancel OK

PIQ Choices Find Again Reset

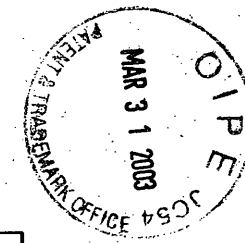
Keyword

- Aleksander Rebbes
- Baal Koreh
- Baal Tefilla
- Belzer Rebbes
- cantors
- Hager, Rabbi Menahem Mendel Ben Hayyim
- Halberstam, Rabbi Yekutiel Judah
- Lubavitcher Rebbes
- minister
- occupations, gabbaim

PIQPerson friends, Simon,
PIQPerson friends [Diamond], Mr.
PIQPerson sisters-in-law [Vogel], Michelle ;
PIQPerson aunts [Wulkan], Freidel,
PIQPerson grandfathers Begleiter ,
PIQPerson grandmothers Begleiter ,
PIQPerson aunts Begleiter , Adela,
PIQPerson uncles Begleiter , Baruch,
PIQPerson uncles Begleiter , Isak ,

12/22

FIGURE 8



Testimony IntCode : 232
Interviewee : Sinai Hart

902

Edit Location Object

5. Prewar Life: Name and Location of synagogue, church, etc. (PIQLocation)

Type of Location 906 912

Enter Plain Text
Cmd - F to Search 910

Click to select
Drag a Keyword. 912

Place Name (Camp, School, Ghetto, etc.)

Street Address

City/Town/Village /Shtete 914

Nearest Large City

State/Province

Country

Postal Code

Specific Location

Keywords...

PIQ Choices

Keyword

Click a box to fill in this list. Then drag a keyword.

Proposed Keywords

Proposed Keyword	Comments
------------------	----------

Paste Location

908

13/22

FIGURE 9

O I P E
 JCS4
 MAR 31 2003
 ATTENTION MARK OFFICE

Testimony IntCode : 232
Interviewee : Sigi Hart
Spreadsheet...

Sections Collapse All

Find

- ▶ 1. PIQ Entry Details
- ▶ 2. Front Page
- ▶ 3. General Interview Details
- ▶ 4. Interviewee Information
- ▶ 5. Prewar Life
 - Preware Addresses
 - Household members (extended family & other)
 - Organizational Affiliation
 - Activities & Interests
- Attend synagogue or church
- ▶ 6. Wartime
- ▶ 7. Postwar
- ▶ 8. Family / People in This Testimony
- ▶ 9. Family Identity
- ▶ 10. Post-Interviewer Information
- ▶ 11. Interviewer Information
- ▶ 12. Notes
- ▶ 13. Rescue and Aid Insert (name)
- ▶ 14. War Crime Trials
- ▶ 15. Liberation Insert Section
- ▶ xxx Non-Catalogueable PIQ Questions

Keywords

PIQ Choices

Keyword

Selected Question Group

Attend synagogue or church

Question	Answer 1	
Did your family attend a synagogue or church prior to the war? (Yes, No)	Yes	
If so, how often? (Plain Text)	Friday and Saturday every week	
Name and Location of synagogue, church, etc. (PIQLocation)	Place Nm: Heidereyer Shul / Berlin (Germany) / Germany / Heidereyer Gasse	
Name of synagogue or church leader? (PIQPerson)		

Keyword Answer Plain Text Answer

PIQ Persons

Type	Prop KWs	
PIQPerson	friends	Simon ,
PIQPerson	friends	[Diamond] , Mr.
PIQPerson	sisters-in-law	[Vogel], Michelle ,
PIQPerson	aunts	[Wulkan] , Freidel ,
PIQPerson	grandfathers	Begleiter , ,
PIQPerson	grandmothers	Begleiter , ,
PIQPerson	aunts	Begleiter , Adela ,
PIQPerson	uncles	Begleiter , Baruch ,
PIQPerson	uncles	Begleiter , Isak ,

FIGURE 11

JOE PIPER
MAR 31 2003
REGISTERED TRADEMARK OFFICE

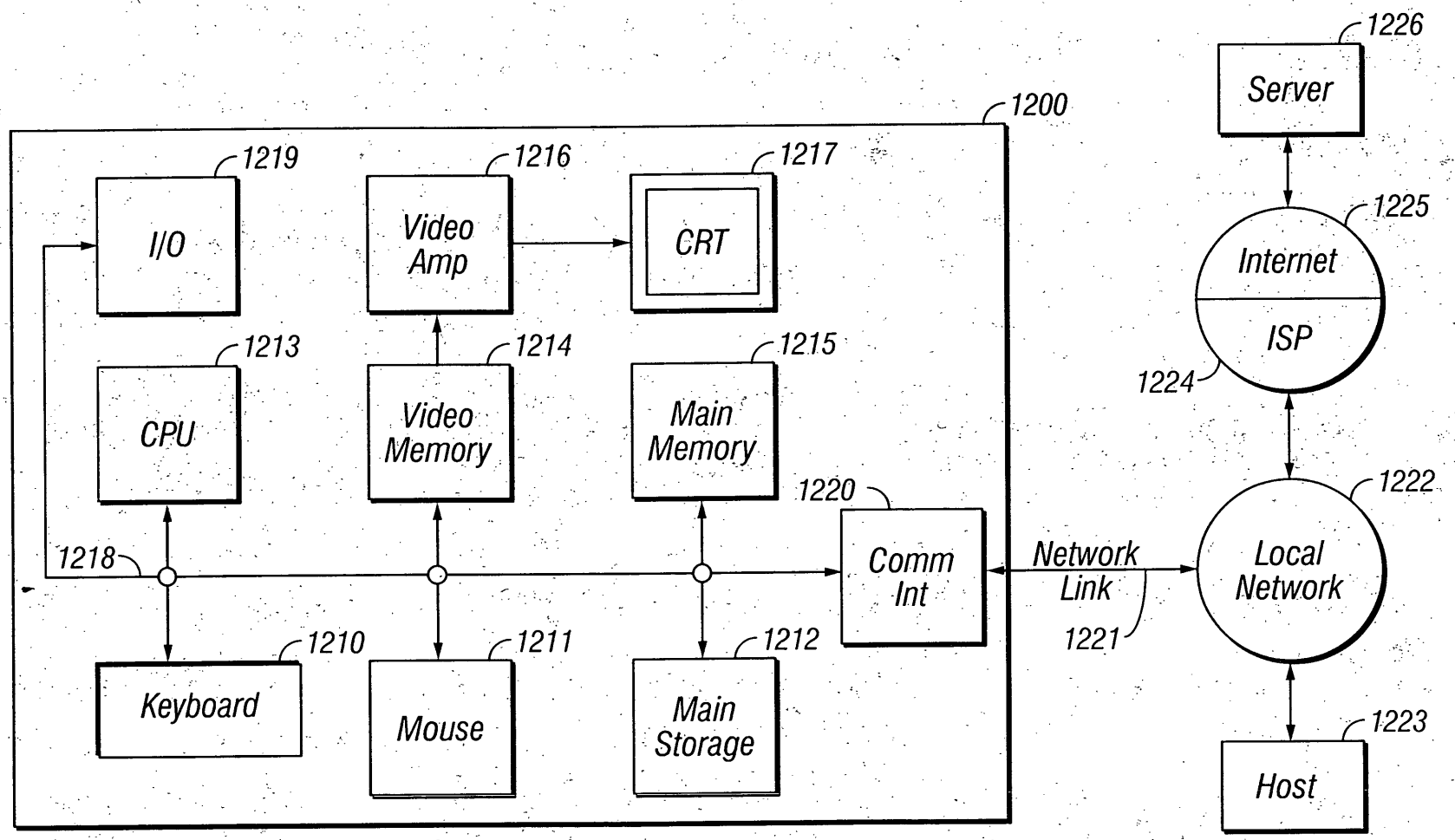


FIGURE 12



16/22

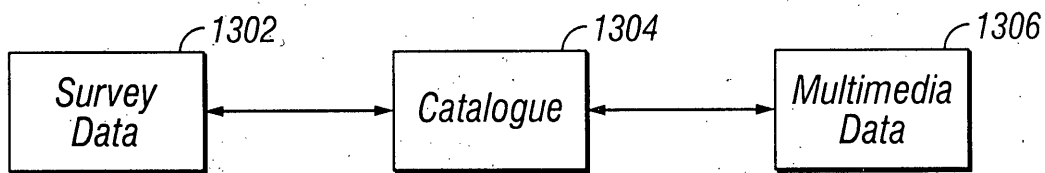


FIGURE 13

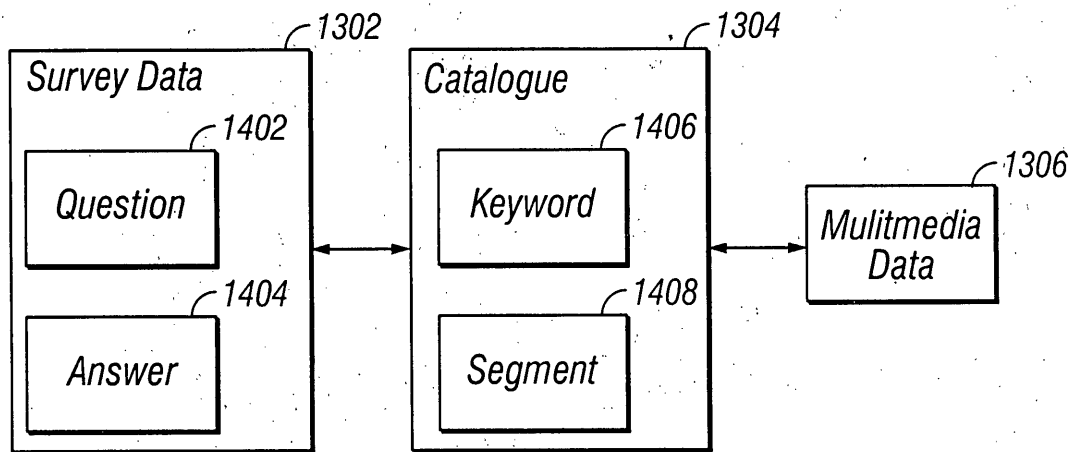


FIGURE 14

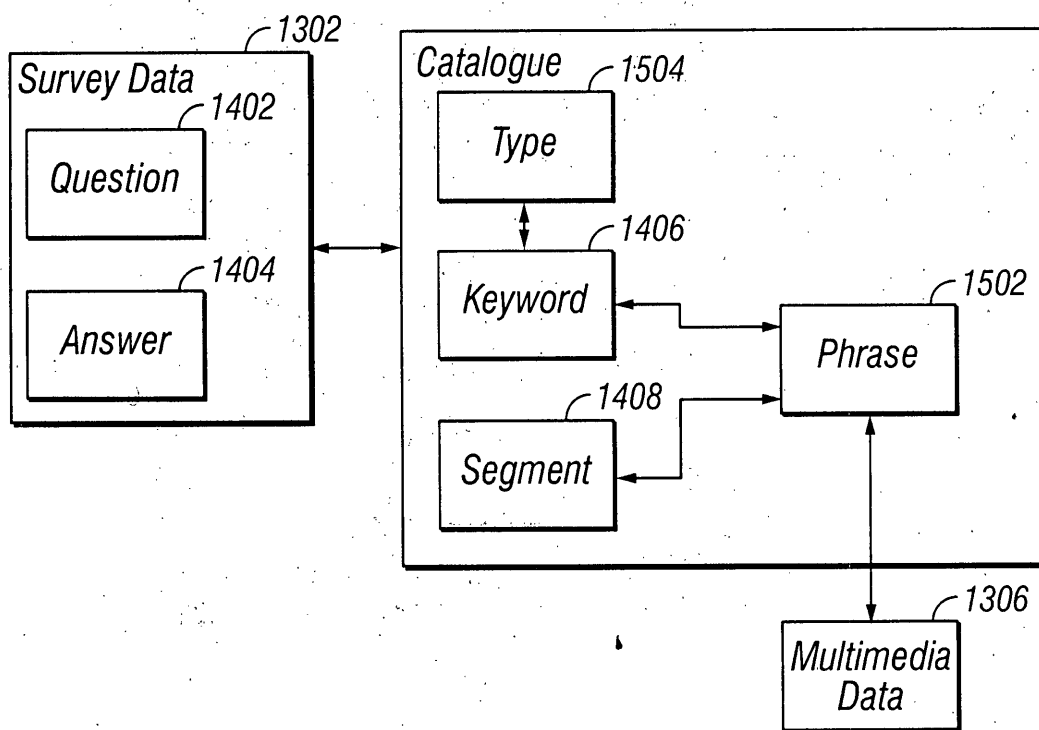


FIGURE 15



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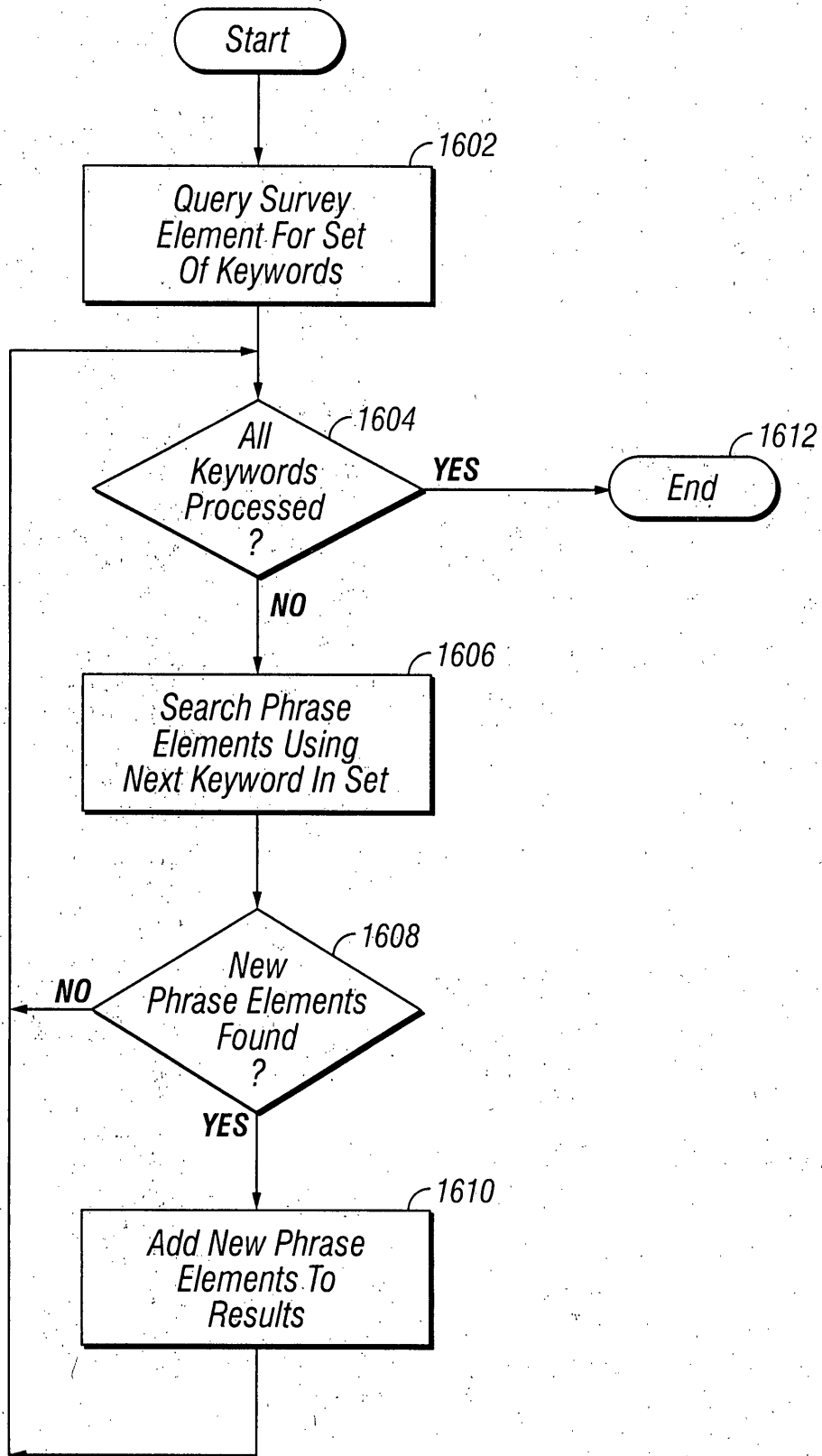
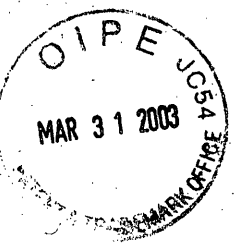


FIGURE 16



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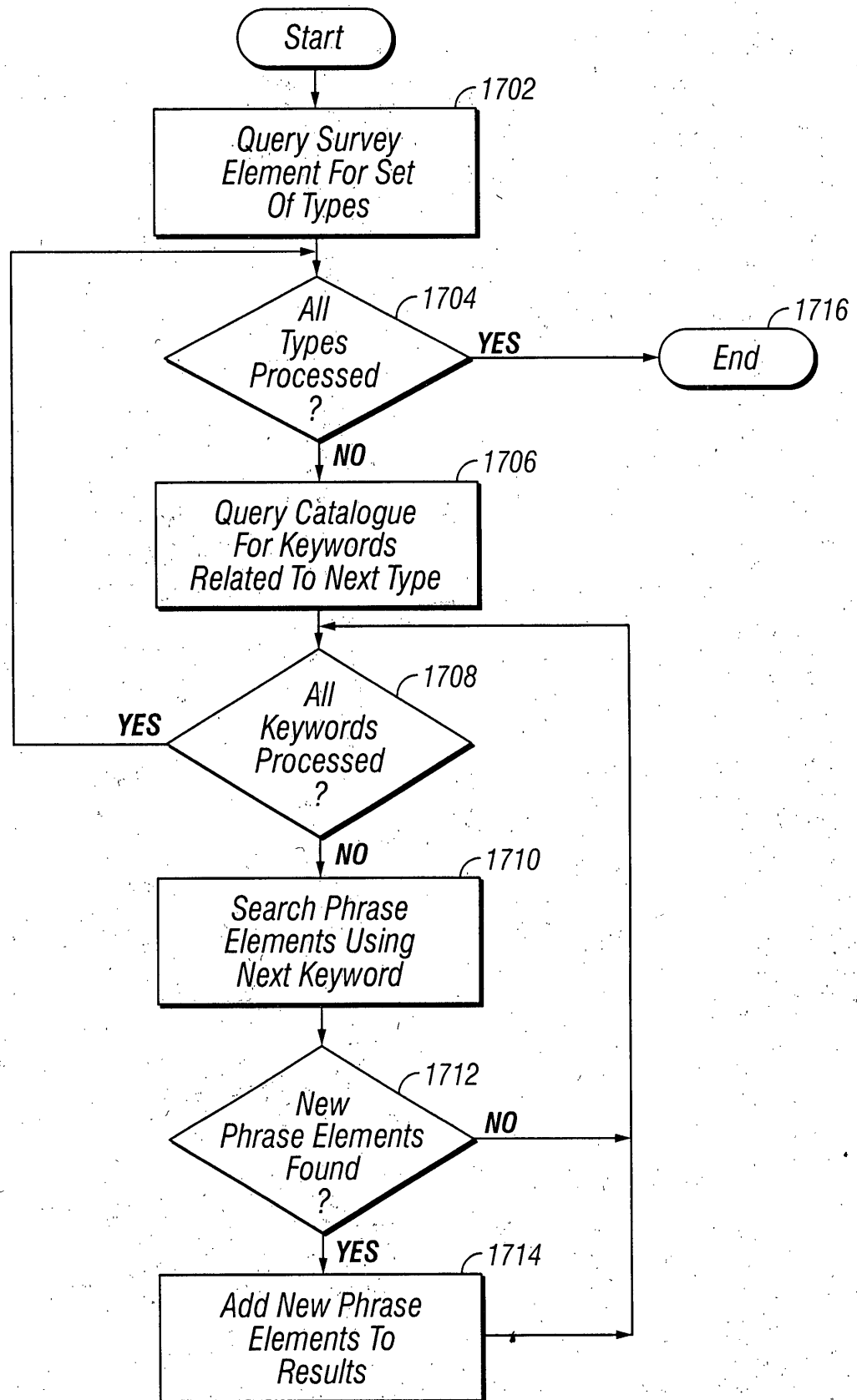


FIGURE 17



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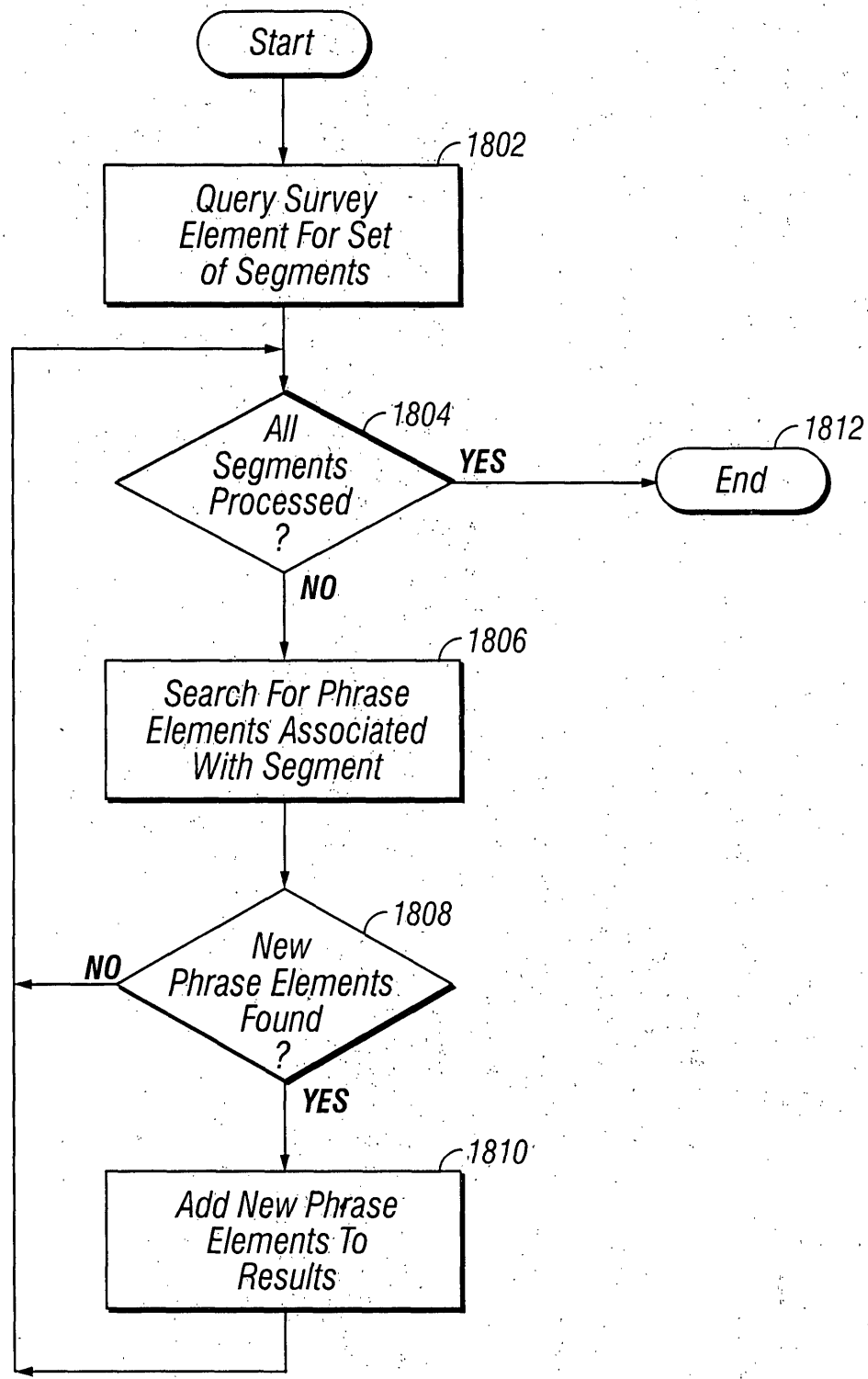


FIGURE 18



20/22

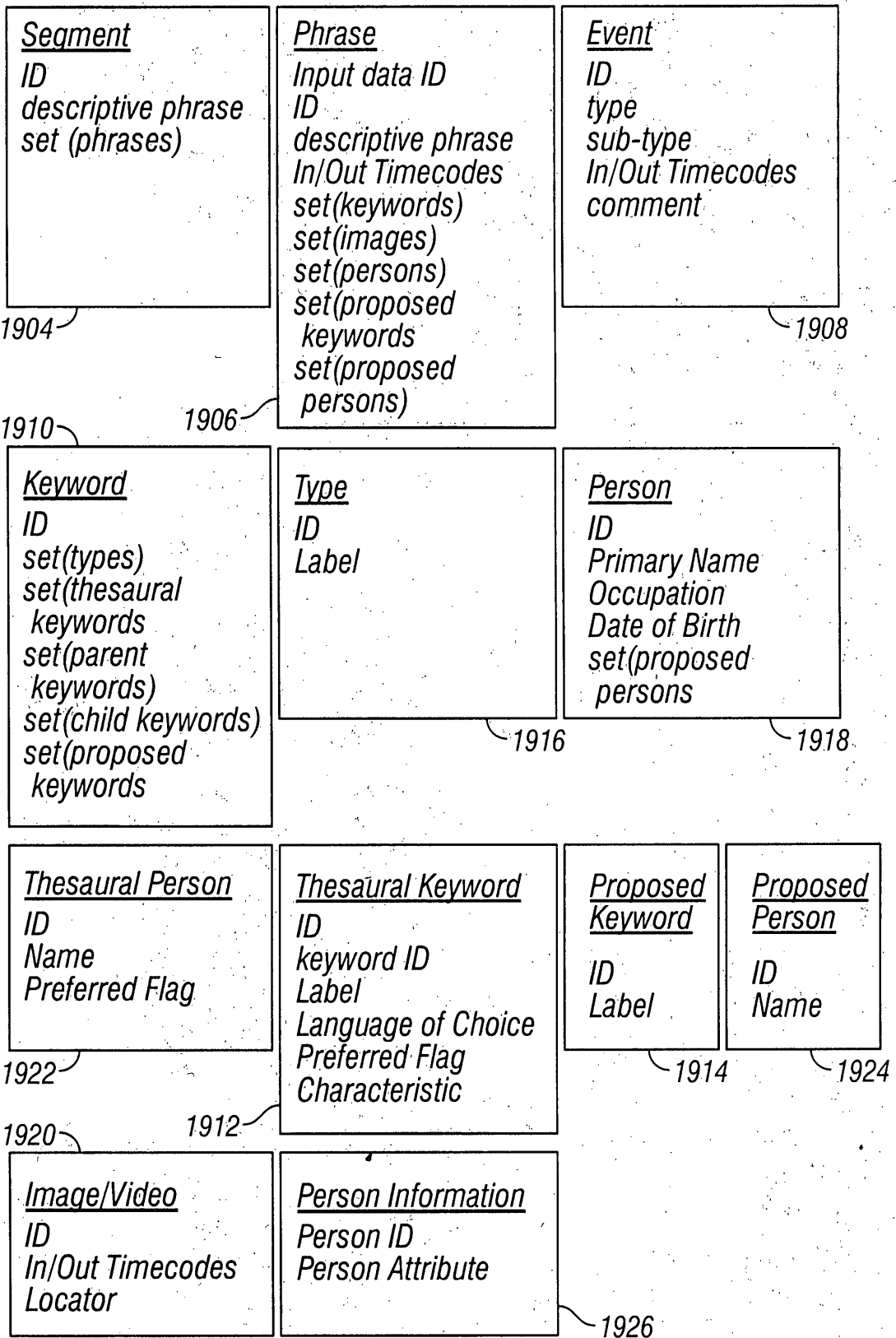


FIGURE 19A



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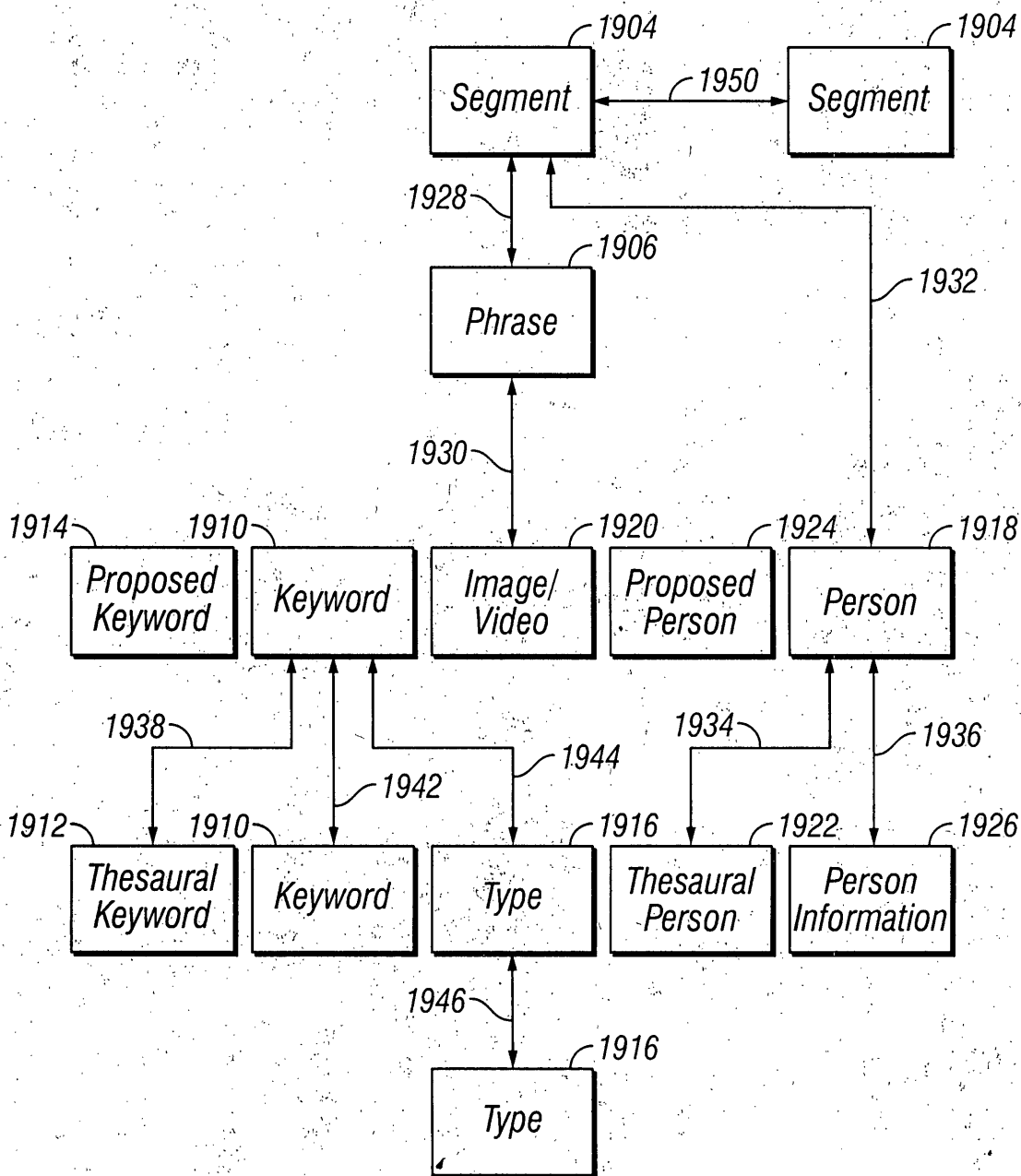
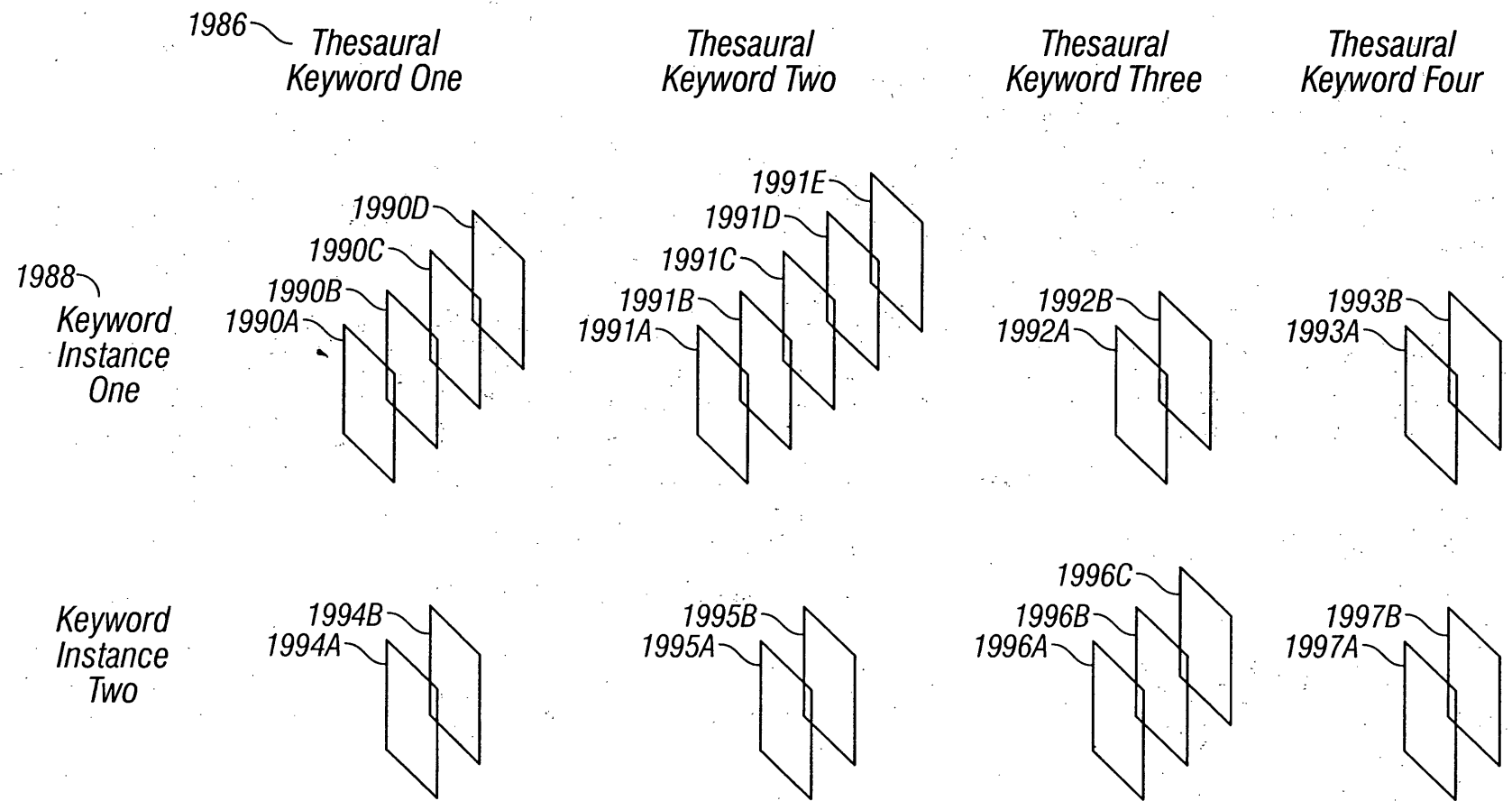
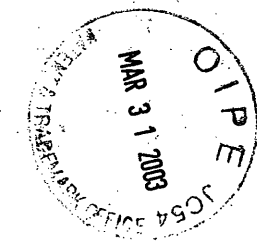


FIGURE 19B



22/22

FIGURE 19C

#11/A
4-16-03
SP



84300.916

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of)
SAMUEL GUSTMAN)
Serial No. 09/659,987)
Filed: September 12, 2000)
For: METHOD AND APPARATUS)
FOR CATALOGUING)
MULTIMEDIA DATA USING)
SURVEYING DATA ...)

Examiner: Diane D. Mizrahi
Group Art Unit: 2175

AMENDMENT AFTER ALLOWANCE

Assistant Commissioner for Patents
Washington, D. C. 20231

Dear Sir:

This is in response to the Notice of Allowance dated December 27, 2002.
Please consider the following Amendments After Allowance to the Specification.

84300.916

1

AMENDMENTS

1. *A* Line 8, page 6, "Figure 2 illustrates," changed to "Figures 2A to 2C illustrate" -
2. *A* Line 4, page 22, "of Figure 2," changed to "of Figures 2A-2C" -
3. *A* Line 5, page 24, "Figure 2 illustrates," changed to "Figures 2A to 2C illustrate" -

The above Amendments do not present any substantial change in the specification but are being made in order to conform the specification to the formal drawings, wherein the originally submitted informal drawing designated as Figure 2 was parceled out into three sheets in the formal drawings designated as Figures 2A, 2B and 2C.

Applicant submits: (A) clean copies of pages 6, 22 and 24 wherein the changes as above-described are indicated, and (B) marked copies of pages 6, 22, and 24 wherein the above-described changes are marked.

Respectfully submitted,
THE HECKER LAW GROUP

Date: March 24, 2003

By: 
Gary A. Hecker
Reg. No. 31,023

THE HECKER LAW GROUP
1925 Century Park East
Suite 2300
Los Angeles, California 90067
(310) 286-0377

CERTIFICATE OF MAILING	
<i>This is to certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231 on March 24, 2003</i>	
Signature: <i>Mario Federis</i>	Date: 03/24/03

84300.916

3

(A) Clean copy of Amendment

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1A illustrates a schema comprising survey elements according to an embodiment of the invention.

5 Figure 1B provides an example of reusable survey elements according to an embodiment of the invention.

Figure 1C provides an example of a structure of a survey instance according to an embodiment of the invention.

10 Figure 2A to 2C illustrate elements of the survey schema of Figure 1A and attributes associated with survey elements according to one or more embodiments of the invention.

Figure 3 illustrates an example of a window in a graphical user interface used to modify instances of section that comprise a survey instance according to an embodiment of the invention.

15 Figures 4A-4B illustrate add section and question panels according to an embodiment of the invention.

Figure 5 provides an example of a display that is used to edit an instance of question according to an embodiment of the invention.

20 Figure 6 illustrates a graphical user interface used to edit an instance of choice group according to one or more embodiments of the invention.

(A) Clean copy of Amendment

In one or more embodiments of the invention, an answer to an instance of question 108 may be stored in answer 110, answerText 120 and/or data object 122. A single-value answer may be stored in an attribute of answer 110 (e.g., a value stored in attribute 266, "answertext" of Figures 2A-2C). None or more
5 instances of answerText 120 may be used to store additional answer text of a question 108. In an embodiment of the invention, a survey element referred to as data object 122 may be used to store a multi-value answer. In an embodiment of the invention, multiple instances of data object 122 may be used to store a multi-value answer to question 108. An attribute of one data object 122 may be
10 stored as attributes of data object 122. Thus, an instance of data object 122 may be associated with another instance of data object 122 and answer 110, for example.

In an embodiment of the invention, data object 122 includes, but is not limited to, person, alias, date, movements and location objects each of which
15 comprise a set of attributes that may be used to store values of a multi-value answer. A person data object may have first name, middle name, last name, date of birth, gender, type, title, etc. attributes, for example. Embodiments of the invention may include additional or different data objects 122 or have additional or different attributes.

20 Survey schema 160 is used to create none or more survey instances 150. Survey instance 150 may be in a print, electronic or other form, for example. In one or more embodiments of the invention, survey instance 150 may be displayed in a graphical user interface (GUI) which may be used to capture survey data. The GUI may be used by a survey participant to enter answers, or

(A) Clean copy of Amendment

Survey Schema Element Attributes

In one or more embodiments of the invention, attributes of elements of survey schema 160 comprise attributes that may be used to store information concerning components of a survey instance 150 and data collected for a survey instance 150 (e.g., participant data). Figure 2A to 2C illustrate elements of survey schema 160 of Figure 1A and attributes associated with survey elements according to one or more embodiments of the invention.

Section 102 includes a section identifier attribute 202 ("SectionID") that uniquely identifies each instance of section 102. A parent identifier attribute 204 ("ParentID") identifies a subsection's parent instance of section 102. Attributes 206 and 208 indicate whether an instance of section 102 may have inserts (e.g., instances of insert 104) and the type of insert(s), respectively. Section name attribute 280 ("SectionName") comprises a name or title of an instance of section 102.

In one or more embodiments of the invention, element 130 of survey schema 160 is used to relate section 102 and question group 106 in a many-to-many relationship. That is, section 102 may include none or more instances of question group 106, and none or more instances of section 102 may contain the same instance of question group 106. Instances of element 130 may be identified using attribute 210 ("SectionQ_id"). Attributes 212 and 214 relate an instance of section 102 using its identifier (section identifier 150) and an instance of question group 106 using its identifier (question group identifier 216, "QGroup_id"), respectively.

(B) Marked copy of Amendment

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1A illustrates a schema comprising survey elements according to an embodiment of the invention.

5 Figure 1B provides an example of reusable survey elements according to an embodiment of the invention.

Figure 1C provides an example of a structure of a survey instance according to an embodiment of the invention.

10 ~~Figure 2 illustrates~~ Figure 2A to 2C illustrate elements of the survey schema of Figure 1A and attributes associated with survey elements according to one or more embodiments of the invention.

Figure 3 illustrates an example of a window in a graphical user interface used to modify instances of section that comprise a survey instance according to an embodiment of the invention.

15 Figures 4A-4B illustrate add section and question panels according to an embodiment of the invention.

Figure 5 provides an example of a display that is used to edit an instance of question according to an embodiment of the invention.

20 Figure 6 illustrates a graphical user interface used to edit an instance of choice group according to one or more embodiments of the invention.

(B) Marked copy of Amendment

In one or more embodiments of the invention, an answer to an instance of question 108 may be stored in answer 110, answerText 120 and/or data object 122. A single-value answer may be stored in an attribute of answer 110 (e.g., a value stored in attribute 266, "answertext" of Figure 2 of Figures 2A-2C). None or more instances of answerText 120 may be used to store additional answer text of a question 108. In an embodiment of the invention, a survey element referred to as data object 122 may be used to store a multi-value answer. In an embodiment of the invention, multiple instances of data object 122 may be used to store a multi-value answer to question 108. An attribute of one data object 122 may be stored as attributes of data object 122. Thus, an instance of data object 122 may be associated with another instance of data object 122 and answer 110, for example.

In an embodiment of the invention, data object 122 includes, but is not limited to, person, alias, date, movements and location objects each of which comprise a set of attributes that may be used to store values of a multi-value answer. A person data object may have first name, middle name, last name, date of birth, gender, type, title, etc. attributes, for example. Embodiments of the invention may include additional or different data objects 122 or have additional or different attributes.

Survey schema 160 is used to create none or more survey instances 150. Survey instance 150 may be in a print, electronic or other form, for example. In one or more embodiments of the invention, survey instance 150 may be displayed in a graphical user interface (GUI) which may be used to capture survey data. The GUI may be used by a survey participant to enter answers, or

(B) Marked copy of Amendment

Survey Schema Element Attributes

In one or more embodiments of the invention, attributes of elements of survey schema 160 comprise attributes that may be used to store information concerning components of a survey instance 150 and data collected for a survey instance 150 (e.g., participant data). ~~Figure 2 illustrates~~ Figure 2A to 2C illustrate elements of survey schema 160 of Figure 1A and attributes associated with survey elements according to one or more embodiments of the invention.

Section 102 includes a section identifier attribute 202 ("SectionID") that uniquely identifies each instance of section 102. A parent identifier attribute 204 ("ParentID") identifies a subsection's parent instance of section 102. Attributes 206 and 208 indicate whether an instance of section 102 may have inserts (e.g., instances of insert 104) and the type of insert(s), respectively. Section name attribute 280 ("SectionName") comprises a name or title of an instance of section 102.

In one or more embodiments of the invention, element 130 of survey schema 160 is used to relate section 102 and question group 106 in a many-to-many relationship. That is, section 102 may include none or more instances of question group 106, and none or more instances of section 102 may contain the same instance of question group 106. Instances of element 130 may be identified using attribute 210 ("SectionQ_id"). Attributes 212 and 214 relate an instance of section 102 using its identifier (section identifier 150) and an instance of question group 106 using its identifier (question group identifier 216, "QGroup_id"), respectively.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/659,987	09/12/2000	Samuel Gustman	84300.916	6340

22804 7590 04/17/2003
THE HECKER LAW GROUP
1925 CENTURY PARK EAST
SUITE 2300
LOS ANGELES, CA 90067

EXAMINER

MIZRAHI, DIANE D

ART UNIT PAPER NUMBER

2175

#12

DATE MAILED: 04/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARK
Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
--------------------	-------------	-----------------------	---------------------

EXAMINER

ART UNIT	PAPER NUMBER
----------	--------------

DATE MAILED:

Response to Rule 312 Communication

1. The amendment filed on 3-31-03 under 37 CFR 1.312 has been considered, and has been:

- a) entered.
- b) entered as directed to matter of form not affecting the scope of the invention.
- c) disapproved because the amendment was filed after the payment of the issue fee.

Any amendment filed after the date the issue fee is paid must be accompanied by a petition under 37 CFR 1.313(c)(1) and the required fee to withdraw the application from issue.

- d) disapproved. See explanation below.
- e) entered in part. See explanation below.

Explanation:

Steve Pearson
Publishing Division



Attorney Docket: 84300.916

2-19 11

Boxm
CC

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

U.S. Patent No. : 6,574,638
 Appl. No. : 09/659,987
 First Named Inventor: : GUSTMAN, SAMUEL
 Filed : September 12, 2000
 Docket No. : 84300.916
 Customer No. : 22804

USPTO
 RECEIPTS ACCOUNTING
 DIVISION
 2011 FEB 23 PM 4:43

Commissioner of Patents
 U.S. Patent and Trademark Office
 P.O. Box 1450
 Alexandria VA 22313-1450

Payment of Maintenance Fee Deficiency Pursuant to 37 CFR 1.28(c)

Sir:

Pursuant to 37 CFR 1.28(c), the patent owner hereby submits payment as itemized below to correct a deficiency in the 7.5 year maintenance fee paid for U.S. Patent No. 6,574,638 on December 3, 2010. The patent owner inadvertently paid the maintenance fee for a small entity, although at the time of payment, the patent owner was no longer entitled to claim small entity status.

Itemization of Deficiency

Current fee for 7.5 year maintenance fee for other than a small entity:	\$2480.00
Amount actually paid by patent owner on December 3, 2010:	<u>\$1240.00</u>
Total amount of deficiency:	\$1240.00

Payment of Deficiency

Payment for the total amount of the deficiency of \$1240.00 is submitted herewith.

02/24/2011 DALLEY 00000007 6574638
 01 FC:1599- 1240.00 OP

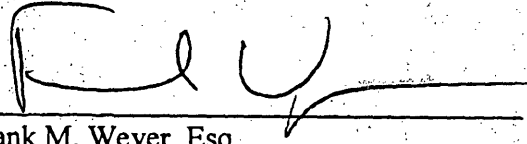
Attorney Docket 84300.916

Respectfully submitted,

THE HECKER LAW GROUP

Date: February 15, 2011

By:



Frank M. Weyer, Esq.
Reg. No. 33,050

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2-18-11

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CC

Attorney Docket: 84300.916



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

U.S. Patent No. : 6,574,638
 Appl. No. : 09/659,987
 First Named Inventor: : GUSTMAN, SAMUEL
 Filed : September 12, 2000
 Docket No. : 84300.916
 Customer No. : 22804

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Commissioner of Patents
 U.S. Patent and Trademark Office
 P.O. Box 1450
 Alexandria VA 22313-1450

Payment of Maintenance Fee Deficiency Pursuant to 37 CFR 1.28(c)

Sir:

Pursuant to 37 CFR 1.28(c), the patent owner hereby submits payment as itemized below to correct a deficiency in the 7.5 year maintenance fee paid for U.S. Patent No. 6,574,638 on December 3, 2010. The patent owner inadvertently paid the maintenance fee for a small entity, although at the time of payment, the patent owner was no longer entitled to claim small entity status.

Itemization of Deficiency

Current fee for 7.5 year maintenance fee for other than a small entity:	\$2480.00
Amount actually paid by patent owner on December 3, 2010:	<u>\$1240.00</u>
Total amount of deficiency:	\$1240.00

Payment of Deficiency

Payment for the total amount of the deficiency of \$1240.00 is submitted herewith.

02/24/2011 DALLEY 00000007 6574638
 01 FC:1599 1240.00 0P

Attorney Docket: 84300.916

Respectfully submitted,

THE HECKER LAW GROUP

Date: February 15, 2011

By: 

Frank M. Weyer, Esq.
Reg. No. 33,050

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UNITED STATES PATENT AND TRADEMARK OFFICE

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THE HECKER LAW GROUP
1925 CENTURY PARK EAST
SUITE 2300
LOS ANGELES CA 90067

MAILED
APR 15 2011
OFFICE OF PETITIONS

In re Application of
Samuel Gustman et al.
Patent No. 6,574,638
Application No. 09/659,987
Filed: September 12, 2000
Attorney Docket No. 84300.916

Paper No. 15

NOTICE

This is a notice regarding your request for acceptance of a fee deficiency submission under 37 CFR 1.28 February 16, 2011.

The Office no longer investigates or rejects original or reissue applications under 37 CFR 1.56. **1098 Off. Gaz. Pat. Office 502 (January 3, 1989)**. Therefore, nothing in this Notice is intended to imply that an investigation was done.

Your fee deficiency submission under 37 CFR 1.28 is hereby **ACCEPTED**.

This application is no longer entitled to small entity status. Accordingly, all future fees paid in this application must be paid at the large entity rate.

Inquiries related to this communication should be directed to the undersigned at (571) 272-2783.

/Tredelle D. Jackson/
Paralegal Specialist
Office of Petitions

PATENT APPLICATION FEE DETERMINATION RECORD

Effective December 29, 1999

Application or Docket Number

659987

CLAIMS AS FILED - PART I

(Column 1) (Column 2)

FOR	NUMBER FILED	NUMBER EXTRA
BASIC FEE		
TOTAL CLAIMS	26 minus 20 = *	6
INDEPENDENT CLAIMS	3 minus 3 = *	
MULTIPLE DEPENDENT CLAIM PRESENT		

* If the difference in column 1 is less than zero, enter "0" in column 2

SMALL ENTITY TYPE OR

OTHER THAN SMALL ENTITY

RATE	FEE	OR	RATE	FEE
	345.00			690.00
X\$ 9=			X\$18=	108. ⁰⁰
X39=			X78=	
+130=			+260=	
TOTAL			TOTAL	798. ⁰⁰

CLAIMS AS AMENDED - PART II

(Column 1) (Column 2) (Column 3)

AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	
	Total	*	Minus	**	=
	Independent	*	Minus	***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM					

SMALL ENTITY OR

OTHER THAN SMALL ENTITY

RATE	ADDITIONAL FEE	OR	RATE	ADDITIONAL FEE
X\$ 9=			X\$18=	
X39=			X78=	
+130=			+260=	
TOTAL ADDIT. FEE			TOTAL ADDIT. FEE	

(Column 1) (Column 2) (Column 3)

AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	
	Total	*	Minus	**	=
	Independent	*	Minus	***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM					

RATE **ADDITIONAL FEE**

RATE **ADDITIONAL FEE**

RATE	ADDITIONAL FEE	OR	RATE	ADDITIONAL FEE
X\$ 9=			X\$18=	
X39=			X78=	
+130=			+260=	
TOTAL ADDIT. FEE			TOTAL ADDIT. FEE	

(Column 1) (Column 2) (Column 3)

AMENDMENT C	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	
	Total	*	Minus	**	=
	Independent	*	Minus	***	=
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM					

RATE **ADDITIONAL FEE**

RATE **ADDITIONAL FEE**

RATE	ADDITIONAL FEE	OR	RATE	ADDITIONAL FEE
X\$ 9=			X\$18=	
X39=			X78=	
+130=			+260=	
TOTAL ADDIT. FEE			TOTAL ADDIT. FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3."

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Table of Contents

1. US6574638B1 Method and apparatus for cataloguing multimedia data using surveying data
-

Family 1/1

1 record(s) per family

Record 1/1 US6574638B1 Method and apparatus for cataloguing multimedia data using surveying data

Publication Number: US6574638B1 20030603

Title: Method and apparatus for cataloguing multimedia data using surveying data

Title - DWPI: Multimedia data cataloging method for computer system, involves searching survey data to identify catalog element used for identifying multimedia data

Priority Number: US2000659987A

Priority Date: 2000-09-12

Application Number: US2000659987A

Application Date: 2000-09-12

Publication Date: 2003-06-03

IPC Class Table:

IPC	Section	Class	Subclass	Class Group	Subgroup
G06F001730	G	G06	G06F	G06F0017	G06F001730

IPC Class Table - DWPI:

IPC - DWPI	Section - DWPI	Class - DWPI	Subclass - DWPI	Class Group - DWPI	Subgroup - DWPI
G06F001730	G	G06	G06F	G06F0017	G06F001730

Assignee/Applicant: Survivors of the Shoah Visual History Foundation, Los Angeles, CA

JP F Terms:

JP FI Codes:

Assignee - Original: Survivors of the Shoah Visual History Foundation

Any CPC Table:

Type	Invention	Additional	Version	Office
Current	G06F 17/30017	Y10S 707/99943	20130101	EP
Current		Y10S 707/99945	20130101	EP

Current		Y10S 707/99948	20130101	EP
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ECLA: G06F001730E

Abstract:

A method and apparatus is described wherein survey data collected from different survey versions may be retained in a cohesive data, or knowledge, base that may be used to catalogue multimedia data. A survey schema is defined that comprises survey elements that may be used to define surveys and capture survey data. In one or more embodiments of the invention, survey data may be linked to a multimedia cataloguing system. The linked survey data may be used alone or in combination with the cataloguing system to retrieve multimedia data.

Language of Publication: EN

INPADOC Legal Status Table:

Gazette Date	Code	INPADOC Legal Status Impact
2011-02-16	SULP	+
Description: SURCHARGE FOR LATE PAYMENT		
2010-12-03	FPAY	+
Description: FEE PAYMENT		
2010-03-12	AS	-
Description: ASSIGNMENT UNIVERSITY OF SOUTHERN CALIFORNIA,CALIFORNIA ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:SURVIVORS OF THE SHOAH VISUAL HISTORY FOUNDATION; REEL/FRAME:024066/0834 2005-12-31		
2006-11-28	FPAY	+
Description: FEE PAYMENT		
2001-06-11	AS	-
Description: ASSIGNMENT SURVIVORS OF THE SHOAH VISUAL HISTORY FOUNDATION, ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNORS:GUSTMAN, SAMUEL; DELURY, BARBARA; REEL/FRAME:011884/0847; SIGNING DATES FROM 20010406 TO 20010423		

Post-Issuance (US):

Reassignment (US) Table:

Assignee	Assignor	Date Signed	Reel/Frame	Date
UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES, CA, US	SURVIVORS OF THE SHOAH VISUAL HISTORY FOUNDATION	2005-12-31	024066/0834	2010-03-12
Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).				
Corresponent: GARY A. HECKER 1925 CENTURY PARK EAST SUITE 2300 LOS ANGELES, CA 90067				
SURVIVORS OF THE SHOAH VISUAL HISTORY FOUNDATION, UNIVERSAL CITY, CA, US	GUSTMAN, SAMUEL	2001-04-23	011884/0847	2001-06-11
	DELURY, BARBARA	2001-04-06		
Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).				
Corresponent: THE HECKER LAW GROUP GARY A. HECKER 1925 CENTURY PARK EAST, SUITE 2300 LOS ANGELES, CALIFORNIA 90067				

Maintenance Status (US):

Litigation (US): 2011-12-02 2011 Preservation Technologies LLC Netflix, Inc. Amazon.com Inc. Amazon.com Inc. Facebook Inc. Sony Corporation of America Dish Network Corporation C.D. California 8:11cv01862 Patent Infringement | 2011-12-02 2011 Preservation Technologies LLC Google Inc Youtube LLC C.D. California 8:11cv01860 | 2011-12-27 2011 Preservation Technologies LLC Hulu LLC C.D. California 8:11cv01985 | 2011-12-27 2011 Preservation Technologies LLC Sony Corporation of America C.D. California 2:11cv10694 | 2011-12-27 2011 Preservation Technologies LLC Dish Network Corporation C.D. California 2:11cv10692 | 2011-12-27 2011 Preservation Technologies LLC Facebook Inc C.D. California 2:11cv10701 | 2011-12-27 2011 Preservation Technologies LLC Sony Corporation of America C.D. California 2:11cv10694 | 2013-10-11 2013 Preservation Technologies LLC Target Brands Inc. Delaware` 1:13cv01692

Opposition (EP):

License (EP):

EPO Procedural Status:

Front Page Drawing:

USPTO Maintenance Report

Patent Bibliographic Data		10/13/2014 04:02 PM			
Patent Number:	6574638	Application Number:	09659987		
Issue Date:	06/03/2003	Filing Date:	09/12/2000		
Title:	METHOD AND APPARATUS FOR CATALOGUING MULTIMEDIA DATA USING SURVEYING DATA				
Status:	12th year fee window opens: 06/03/2014		Entity:	LARGE	
Window Opens:	06/03/2014	Surcharge Date:	12/04/2014	Expiration:	N/A
Fee Amt Due:	\$7,400.00	Surchg Amt Due:	\$0.00	Total Amt Due:	\$7,400.00
Fee Code:	1553	MAINTENANCE FEE DUE AT 11.5 YEARS			
Surcharge Fee Code:					
Most recent events (up to 7):	02/16/2011 12/03/2010 11/28/2006	Payment of Maintenance Fee under 1.28(c). Payment of Maintenance Fee, 8th Yr, Small Entity. Payment of Maintenance Fee, 4th Yr, Small Entity. --- End of Maintenance History ---			
Address for fee purposes:	THE HECKER LAW GROUP 1925 CENTURY PARK EAST SUITE 2300 LOS ANGELES CA 90067				