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(54) **REGISTRATION AND MAINTENANCE OF ADDRESS DATA FOR EACH SERVICE POINT IN A TERRITORY**

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This patent is subject to a terminal disclaimer.

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G06F 17/30   (2006.01)
(52) **U.S. Cl.** **707/776**
(58) **Field of Classification Search** 707/776, 707/756, 603
See application file for complete search history.

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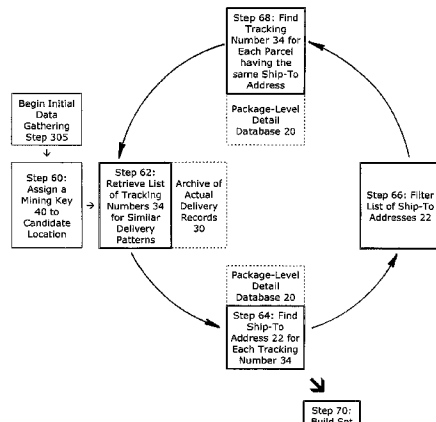
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(57)   **ABSTRACT**

A computer system and method is disclosed for mining current and archived address data in order to identify a preferred address for each service point in a territory. The data mining system may start in response to the presentation of a candidate address for matching. The set of mined data may be prioritized by clustering like characteristics, building similarity matrices, and by constructing dendrograms with nodes joined according to common characteristics. A computer system and method for maintaining a central database of preferred addresses is also disclosed. Selected address data gathered in a queue may be scored by characteristic, grouped by consignee location, and staged for processing. The scored queue of data may be prioritized by clustering like characteristics, building similarity matrices, and by constructing dendrograms.

28 Claims, 62 Drawing Sheets

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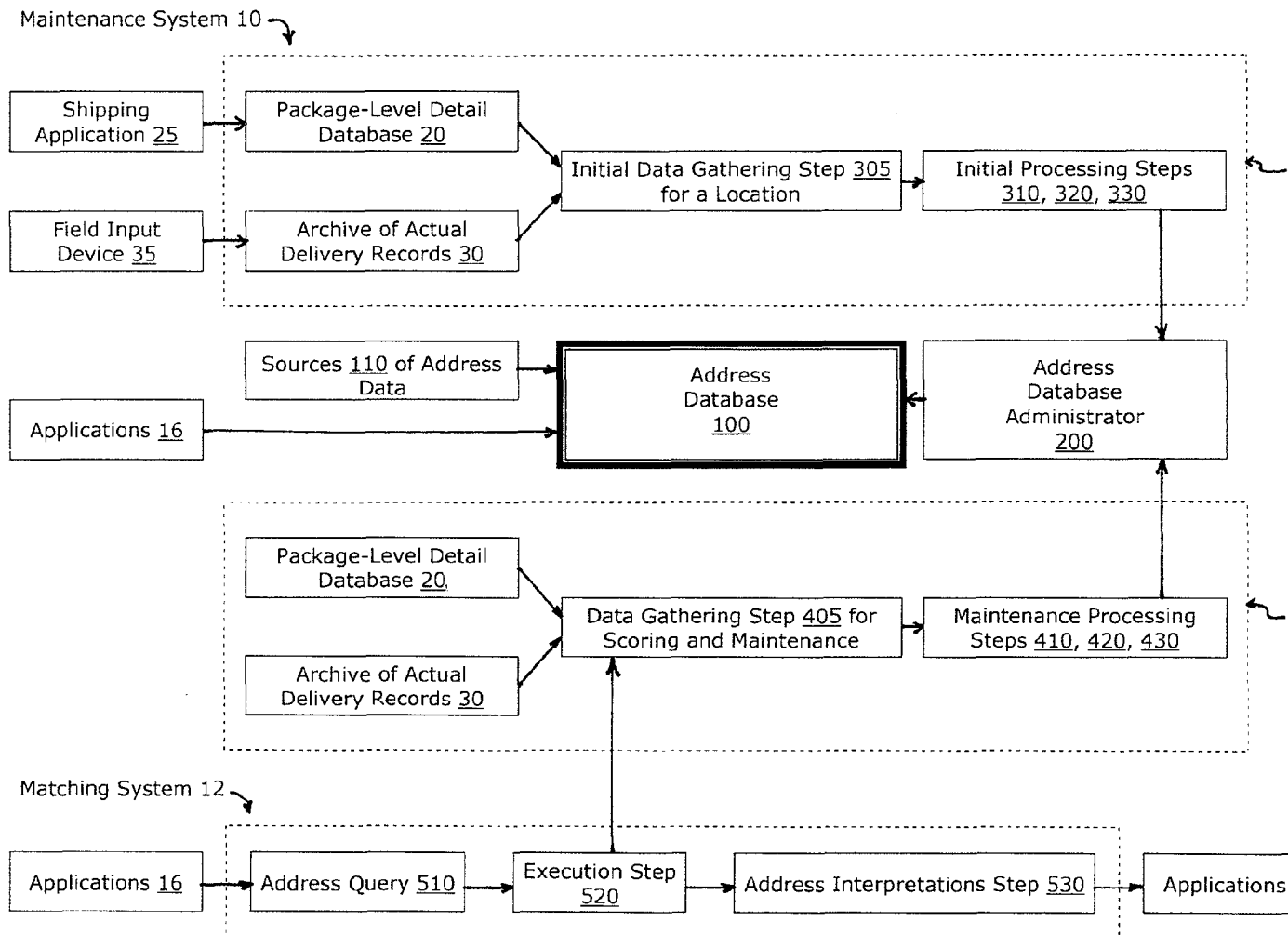Office Action dated Dec. 1, 2011, for Canadian Application No. 2,593,851.

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Fig. 1

Maintenance System 10

Shipping Application 25 → Package-Level Detail Database 20

Field Input Device 35 → Archive of Actual Delivery Records 30

Initial Data Gathering Step 305 for a Location → Initial Processing Steps 310, 320, 330

Sources 110 of Address Data → Address Database 100

Applications 16 →

Address Database Administrator 200

Package-Level Detail Database 20.

Archive of Actual Delivery Records 30

Data Gathering Step 405 for Scoring and Maintenance → Maintenance Processing Steps 410, 420, 430

Matching System 12

Applications 16 → Address Query 510 → Execution Step 520 → Address Interpretations Step 530 → Applications

AMS Database Administration

Customer Registration Information

Company Name:	Costco Connection
Receiving Location:	Brookstone Store 25
Address:	3333 Bristol Street^South Coast Plaza Mall^^Costa Mesa, CA 92626^
Location Configuration:	Multi-Tenant Shopping/Strip Mall
Comments:	This consignee also receive packages for Brookstone Store number 15
Deferral Reason:	

Reg. Date:
Mining Status: 4-Mining Complete
Status: Pending

Match Date
Projected: 16.51 %
Current: 0.0 %

False Positive Ra
Projected: 0
Current: 0.0

Minimum Expected Match Rate 93

0	2	390	845	7	7

Grouping
Cont:
0.3

Join Reason:
Co-Delivered
Most common combination ^800^^LAKE^DR^^^ISSAQUAH^98027^^US^ ,CHRISTENSEN, D, BURBANK (1%)
Most common recorded Delivery Address ^999^^LAKE^DR^^^ISSAQUAH^98027^^US^(57%)

Join Reason:

Most common combination
Most common recorded Delivery Address

Sub Group Action: ▼   Grouping Confidence: Outcome:

+	V	1	COSTCO^SEAN MCCENERNEY^999 LAKE DR^^^ISSAQUAH^WA^98027	A-Add
+	V	1	COSTCO^QUALITY ASSURANCE DEPARTMENT/SHER^900 LAKE DRIVE^^^ISSAQUAH^WA^98027	A-Add
+	V	1	COSTCO^BECKY S^1045 LAKE DRIVE^^^ISSAQUAH^WA^98027	A-Add
	V	1	COSTCO^ATTN ALLEN WEBSTER^1045 LAKE DR^^^ISSAQUAH^WA^98027	A-Add
	V	2	COSTCO^BECKY SCHMIDT^1045 LAKE DR^^^ISSAQUAH^WA^98027	A-Add
+	V	1	COSTCO^CORPORATE OFFICE^^999 LAKE DRIVE^^^ISSAQUAH^WA^98027	
+	V	1	COSTCO^CORPORATE OFFICE^^COSTCO CORPORATE OFFICE^999 LAKE DR^^^ISSAQUAH^WA^98027	
+	V	1	COSTCO WHOLE^^999 LAKE DR^^^ISSAQUAH^WA^98027	
+	V	1	COSTCOWHOLESALE^^ATTN:MICHELLE HUSHBY^SMALL ELECTRICS^999 LAKE DRIVE^^^ISSAQUAH^WA^98027	

◄

View Registration Information		Accept	Delete	Reject Registration	FIG. 2	Skip

Unit of Work loading complete

Step 68: Find Tracking Number 34 for Each Parcel having the same Ship-To Address

Package-Level Detail Database 20

Begin Initial Data Gathering Step 305

↓

Step 60: Assign a Mining Key 40 to Candidate Location

→

Step 62: Retrieve List of Tracking Numbers 34 for Similar Delivery Patterns

Archive of Actual Delivery Records 30

Step 66: Filter List of Ship-To Addresses 22

Package-Level Detail Database 20

Step 64: Find Ship-To Address 22 for Each Tracking Number 34
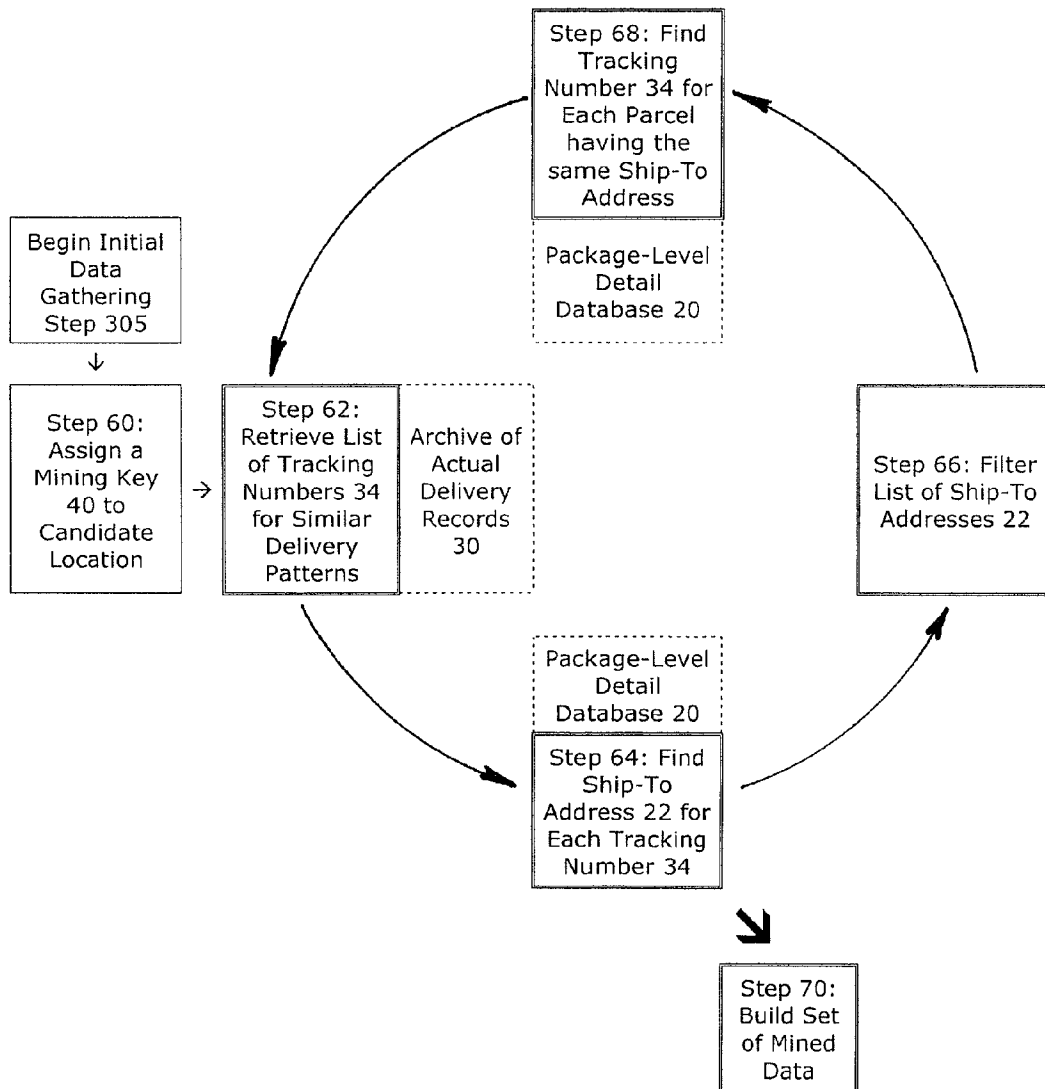
Step 70: Build Set of Mined Data

Fig. 3

DOCKET ALARM

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