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(54) **SYSTEM AND METHOD FOR PROACTIVE CONTENT DELIVERY BY SITUATION LOCATION**

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(52)　**U.S. Cl.** **342/357.09**; 342/357.01; 342/357.03; 342/357.07; 342/357.06; 342/357.09; 342/357.1; 701/23; 701/24; 701/200; 701/213; 701/214; 340/988; 340/990; 340/995
(58)　**Field of Search** 342/357.1, 357.01, 342/357.03, 357.06, 357.07, 357.09, 46, 47; 701/23, 24, 200, 213, 214; 340/988, 990, 995

(56)　　　　　　**References Cited**

U.S. PATENT DOCUMENTS

4,644,351　A　*　2/1987　Zabarsky et al. 340/7.21
5,337,044　A　*　8/1994　Folger et al. 340/7.1
5,469,362　A　*　11/1995　Hunt et al. 700/213
5,758,049　A　*　5/1998　Johnson et al. 345/302
6,073,062　A　*　6/2000　Hoshino et al. 701/3
6,236,365　B1　*　5/2001　LeBlanc et al. 342/457
6,252,544　B1　*　6/2001　Hoffberg 342/357.1

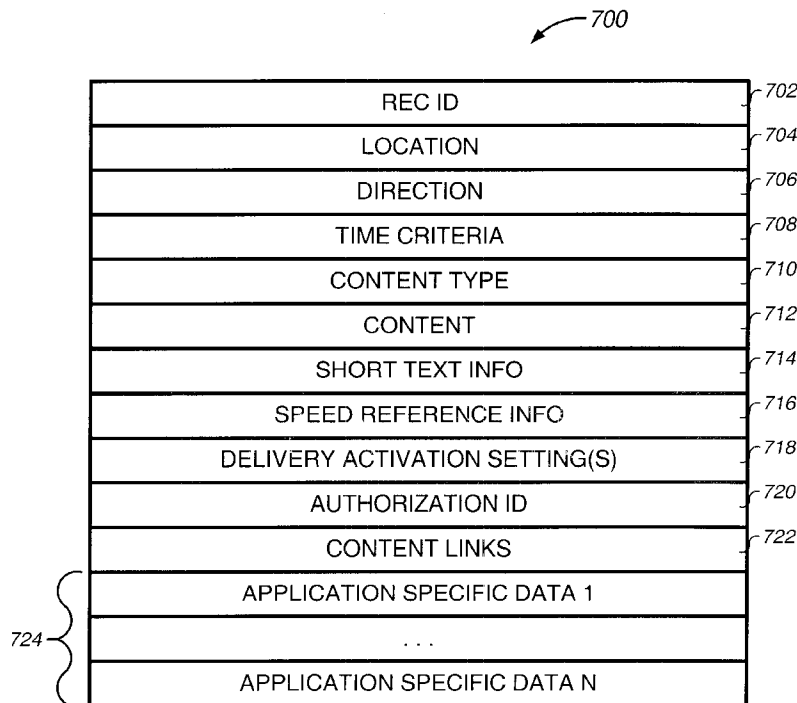* cited by examiner

Primary Examiner—William A. Cuchlinski, Jr.
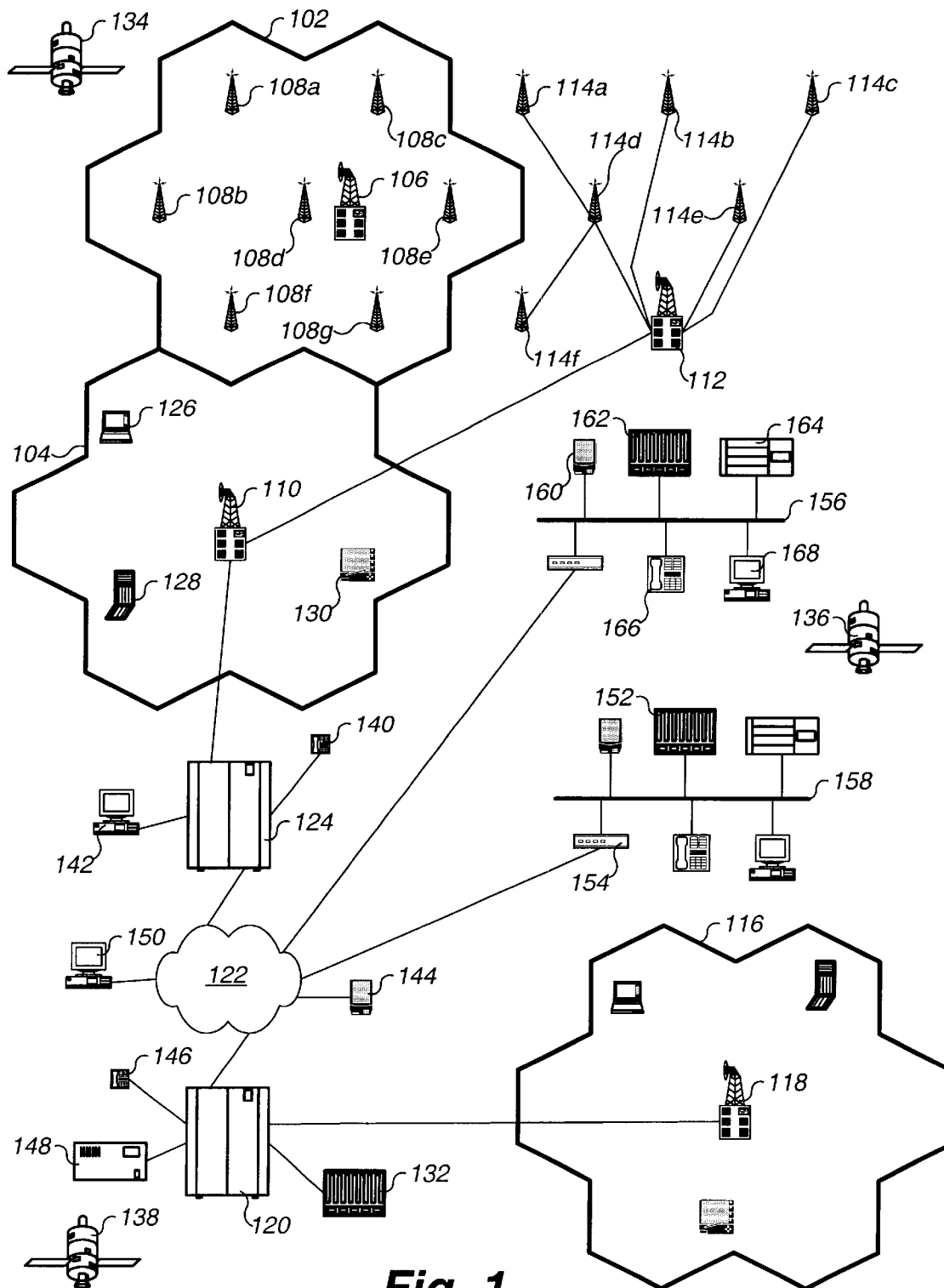*Assistant Examiner*—McDieunel Marc
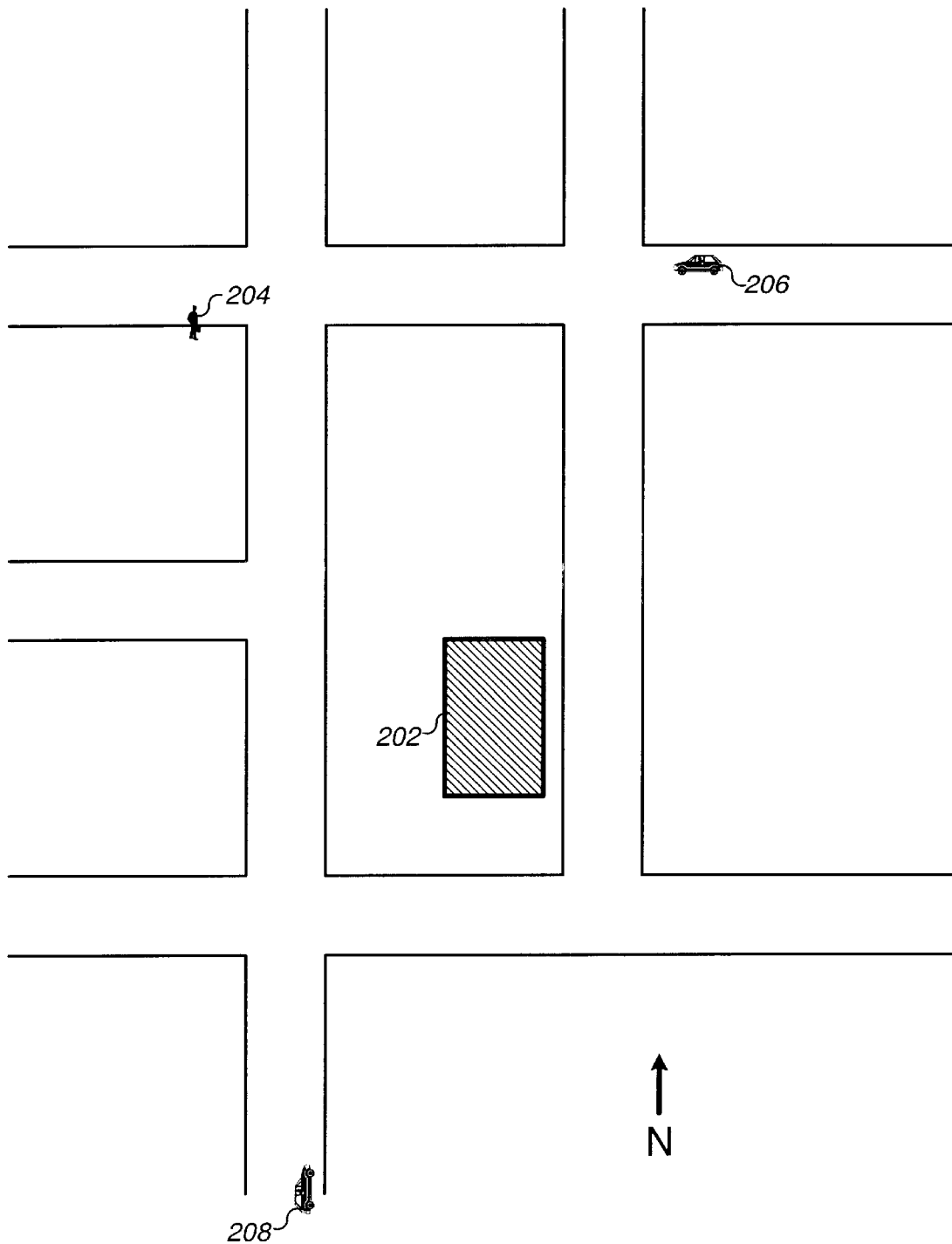(74) *Attorney, Agent, or Firm*—Richard K. Robinson
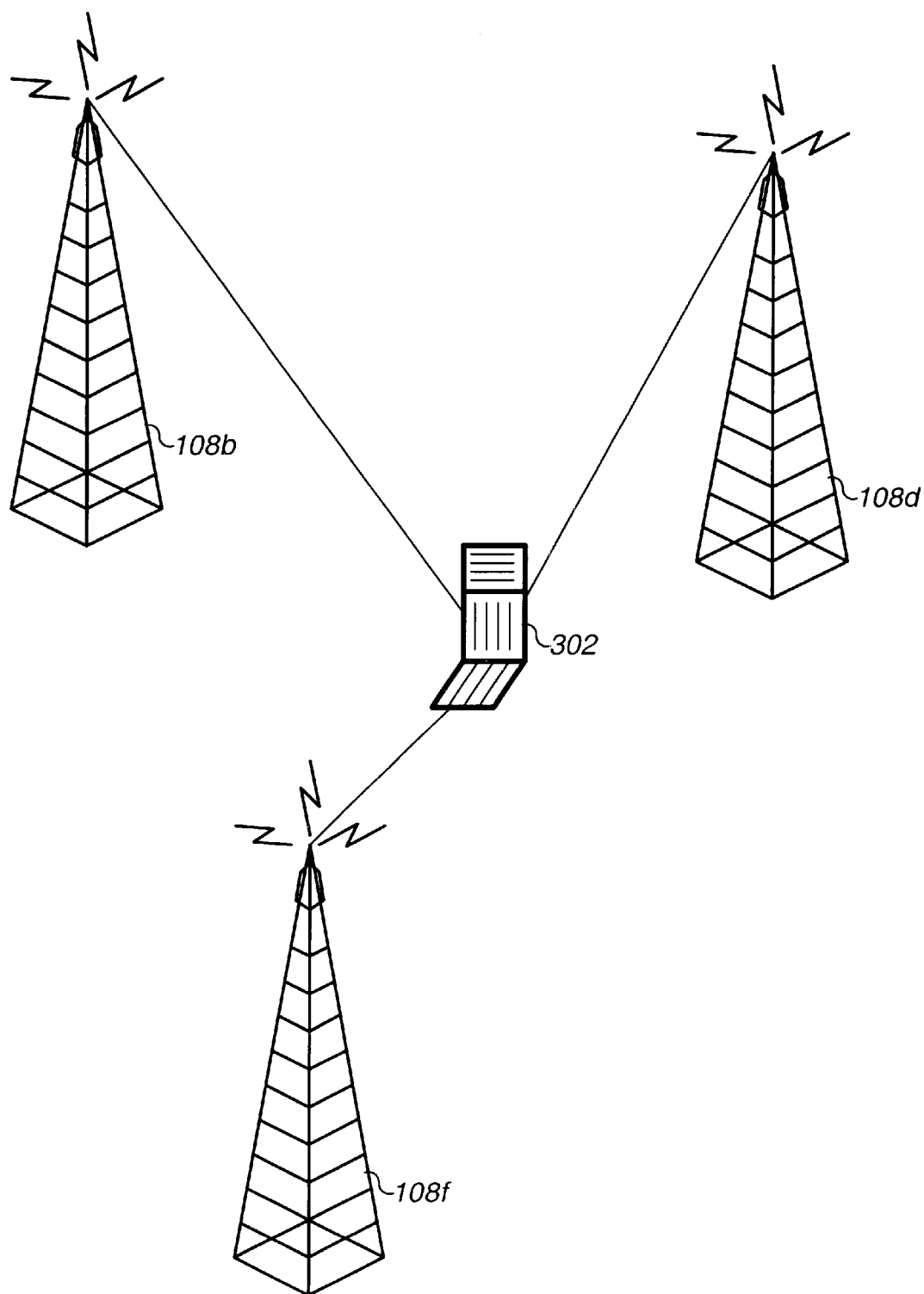
(57)　　　　　　**ABSTRACT**

Provided is transmission of situational location dependent information from a server data processing system to a receiving data processing system. The server data processing system communicates with the receiving data processing system in a manner by pushing content when appropriate. A candidate delivery event associated with a current positional attribute of the receiving data processing system is recognized and a situational location of the remote data processing system is determined. The candidate delivery event may be a location and/or direction change, device state change, or movement exceeding a movement tolerance. The situational location of the remote data processing system may be its location, direction, location and direction, proximity to a location, state change, or location and/or direction relative to a previous location and/or direction, or combinations thereof. A set of delivery content from a delivery content database is transmitted from the server data processing system to the receiving data processing system according to the situational location of the receiving data processing system, and according to delivery constraints. The delivery content is configurable by authorized administrators on an instant activation basis for proactive delivery.

22 Claims, 36 Drawing Sheets

700
702 REC ID
704 LOCATION
706 DIRECTION
708 TIME CRITERIA
710 CONTENT TYPE
712 CONTENT
714 SHORT TEXT INFO
716 SPEED REFERENCE INFO
718 DELIVERY ACTIVATION SETTING(S)
720 AUTHORIZATION ID
722 CONTENT LINKS
724 APPLICATION SPECIFIC DATA 1 . . . APPLICATION SPECIFIC DATA N

Fig. 1

204

206

202

N

208

Fig. 2

108b

108d

302

108f

Fig. 3A

310
START - Server locating a particular device

312
Nearest base stations continue pulse reporting signal strength w/ AOA or TDOA to main controller

314
Controller(s) determines strongest signal base stations for device

316
Base station location information accessed for strongest base stations

318
TDOA or AOA of strongest signal base stations used to calculate locaton of device

320
Access location history data of previous location(s)

322
Appropriately prune location history data for device

324
Determine direction based on current versus previous location(s)

326
Calculate distance moved since previous location of deliverable content db check

328
Movement tolerance exceeded?

Yes

No

330
Direction change?

No

Yes

332
Post event with parameters to service handling situational location change

334
Append entry to location history data

Fig. 3B

DOCKET ALARM

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