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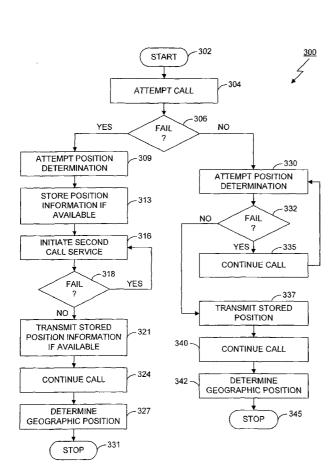
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(54) Title: LOCATION CAPABLE MOBILE HANDSET



(57) Abstract: The location capable mobile handset allows the user to provide a call recipient with the location of an unsuccessful attempted emergency call. In one specific example, the call may be an E911 call to a PSAP dispatcher. Additionally, the call may be to a towing service, or to a family member or friend to request assistance. The call may be any call that a mobile handset user wants to send location information to the party that has been called. Returning to the E911 call example, the location information reported to dispatcher can include the location of initial E911 call, current location during a successful E911 call, or ground track information from the initial location to the current location. When an E911 call is unsuccessfully attempted, the mobile handset stores the location of the mobile handset at that time. This information can later be transmitted when the mobile handset is in a coverage area. Additionally, the mobile handset can auto-dial 911 upon entering a service area after an unsuccessful E911 attempt. Alternately the user can be prompted to initiate an E911 call when the mobile handset enters a service area.





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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW,

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EPO-Internal, WPI Data, INSPEC

	NTS CONSIDERED TO BE RELEVANT		
ategory °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
(EP 0 789 498 A (FORD MOTOR CO) 13 August 1997 (1997-08-13)	1-6, 8-18, 20-32	
′	column 1, line 3 - line 21	7,19, 33-38	
	column 3, line 52 - column 5, line 48 column 6, line 45 - line 52 figures 1,2,4		
,	US 5 479 482 A (GRIMES GARY J) 26 December 1995 (1995-12-26) column 2, line 9 - line 43 column 6, line 16 - column 8, line 32 figure 3	7,19,38	

Y Further documents are listed in the continuation of box C.	X Patent family members are listed in annex.		
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C.(Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6 295 454 B1 (BOLTZ DAVID ET AL) 25 September 2001 (2001-09-25) column 4, line 60 - line 65 column 5, line 65 - column 6, line 14	33-37
A	CHRISTIE J ET AL: "Development and deployment of GPS wireless devices for E911 and location based services" IEEE 2002 POSITION LOCATION AND NAVIGATION SYMPOSIUM. (PLANS 2002). PALM SPRINGS, CA, APRIL 15 - 18, 2002, POSITION LOCATION AND NAVIGATION SYMPOSIUM, NEW YORK, NY: IEEE, US, 15 April 2002 (2002-04-15), pages 60-65, XP010590486 ISBN: 0-7803-7251-4 the whole document	1-38
A	GARMIN CORPORATION: "GPSMAP 180 OWNER'S MANUAL AND REFERENCE"'Online! March 1999 (1999-03), pages 34-46, XP002297874 TAIWAN Retrieved from the Internet: URL:www.computerdoktor24.de/manuals/map180 .pdf> 'retrieved on 2004-09-24! page 34, line 1 - page 46, line 26	33-37

INTERNATIONAL SEARCH REPORT

ational Application No
/US2004/009301

Patent document cited in search report		Publication date	Patent family member(s)		Publication date	
EP 0789498	A	13-08-1997	US CA DE DE EP JP	5890061 A 2196939 A1 69626187 D1 69626187 T2 0789498 A2 9233562 A	30-03-1999 10-08-1997 20-03-2003 25-09-2003 13-08-1997 05-09-1997	
US 5479482	Α	26-12-1995	NONE			
US 6295454	B1	25-09-2001	NONE			