

Title (en)  
NETWORK-ASSISTED GLOBAL POSITIONING SYSTEMS, METHODS AND TERMINALS INCLUDING DOPPLER SHIFT AND CODE PHASE ESTIMATES

Title (de)  
NETZWERKUNTERSTÜTZTE GLOBALENAVIGATIONSSYSTEME, VERFARHEN UND ENDGERÄTE MIT DOPPLERVERSchiebungs-UNDCODEPHASENSCHÄTZUNGEN

Title (fr)  
SYSTEMES MONDIAUX DE POSITIONNEMENT ASSISTES PAR RESEAU, PROCEDES ET TERMINAUX UTILISANT DES ESTIMATIONS DE DECALAGE DOPPLER ET DE PHASE DE CODE

Publication  
**EP 1581821 A4 20110216 (EN)**

Application  
**EP 04700654 A 20040107**

Priority  
• US 2004001184 W 20040107  
• US 43896703 P 20030109

Abstract (en)  
[origin: WO2004063761A2] A mobile terminal is configured to receive wireless communications including GPS data from a terrestrial and/or satellite wireless network, and to perform pseudo-range measurements using the GPS data that is received. The mobile terminal may be configured to perform pseudo-range measurements by receiving GPS coarse/acquisition (C/A) signals from GPS satellites, estimating Doppler shifts in the received GPS C/A signals, and estimating received code phases of the GPS C/A signals using the Doppler shifts that are estimated. The estimated code phases and/or the estimated Doppler shifts of the GPS C/A signals can provide the pseudo-range measurements. By removing the Doppler shift from the received signal samples prior to performing the code phase measurement, reduced computational complexity and/or processing time may be obtained.

IPC 1-7  
**G01S 1/00**

IPC 8 full level  
**A61P 15/18** (2006.01); **G01S 1/00** (2006.01); **G01S 5/02** (2010.01); **G01S 19/05** (2010.01); **G01S 19/09** (2010.01)

CPC (source: EP US)  
**A61P 15/18** (2017.12 - EP); **G01S 19/05** (2013.01 - EP); **G01S 19/09** (2013.01 - EP); **G01S 19/46** (2013.01 - EP US)

Citation (search report)  
• [X] WO 9728455 A1 19970807 - STANFORD TELECOMM INC [US]  
• See references of WO 2004063761A2

Citation (examination)  
• EP 1152255 A2 20011107 - LUCENT TECHNOLOGIES INC [US]  
• EP 1008863 A2 20000614 - GEN ELECTRIC [US]  
• EP 0874248 A2 19981028 - LOCKHEED CORP [US]  
• EP 0902554 A2 19990317 - LUCENT TECHNOLOGIES INC [US]

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**WO 2004063761 A2 20040729**; **WO 2004063761 A3 20070118**; AU 2004204511 A1 20040729; AU 2004204511 B2 20080821; AU 2004204511 C1 20091008; AU 2008203159 A1 20080807; AU 2008203159 B2 20091203; AU 2008203159 C1 20100603; CA 2512271 A1 20040729; CA 2512271 C 20171219; EP 1581821 A2 20051005; EP 1581821 A4 20110216; MX PA05007410 A 20050912

DOCDB simple family (application)  
**US 2004001184 W 20040107**; AU 2004204511 A 20040107; AU 2008203159 A 20080716; CA 2512271 A 20040107; EP 04700654 A 20040107; MX PA05007410 A 20040107