Internal distribution code:
(A) [-] Publication in OJ
(B) [-] To Chairmen and Members
(C) [-] To Chairmen
(D) [X] No distribution

Datasheet for the decision of 24 June 2014

Case Number: T 1573/09 - 3.4.01

Application Number: 01301437.8

Publication Number: 1130414

IPC: G01S5/14

Language of the proceedings: EN

Title of invention:
Differential GPS and/or GLONASS with wireless communications capability

Applicant:
Alcatel-Lucent USA Inc.

Headword:

Relevant legal provisions:
EPC 1973 Art. 56

Keyword:
Inventive step - (no)

Decisions cited:

Catchword:

Beschwerdekammern
Boards of Appeal
Chambres de recours

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 1573/09 - 3.4.01

D E C I S I O N
of Technical Board of Appeal 3.4.01
of 24 June 2014

Appellant: (Applicant)	Alcatel-Lucent USA Inc. 600-700 Mountain Avenue Murray Hill, NJ 07974 (US)
Representative:	Novagraaf Technologies 122, rue Edouard Vaillant 92593 Levallois-Perret Cedex (FR)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 6 March 2009 refusing European patent application No. 01301437.8 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	G. Assi
Members:	P. Fontenay
	M. Vogel

Summary of Facts and Submissions

I. The appeal lies from the decision of the examining division to refuse European patent application No. 01 301 437.8. The decision was dispatched on 6 March 2009.

II. In its decision, the examining division held that the subject-matter of claims 1-8 filed by letter of 20 January 2009 did not involve an inventive step in the sense of Article 56 EPC 1973.

The objection of lack of inventive step relied on the teaching of document EP-A-0 978 728 (D1), considered to illustrate the closest prior art. According to a first approach, the examining division held that the claimed subject-matter was obvious when considering the teaching provided by document WO-A-99/54753 (D2) in the light of the general requirements to identify the latitude and longitude of a mobile unit making a 911 (urgency) call, specified in document D4 ("*Report and Order and Further Notice of Proposed Rulemaking*" from the Federal Communications Commission (FCC) released on 26 July 1996), referred to by explicit reference in D2. The examining division further considered, according to a second approach, that the claimed subject-matter resulted in an obvious manner also from a combination of document D1 and document D3 (US-A-5 604 765).

III. The appellant (applicant) lodged an appeal against this decision on 4 May 2009. The appeal fee was paid on the same day. The appellant requested that the decision be set aside and a patent be granted.

In the written statement setting out the grounds of appeal, filed on 6 July 2009, the appellant confirmed

the request that the decision under appeal be set aside. Moreover, the appellant specified that the application documents on which the request is based are those "*currently on file*". Insofar as the claims are concerned, the claims on file are claims 1-8 as underlying the decision under appeal, i.e. as filed on 20 January 2009.

IV. On 4 February 2014 a summons to attend oral proceedings, due to take place on 24 June 2014, was issued.

V. In a communication pursuant to Article 15(1) RPBA, annexed to the summons, the Board expressed its provisional opinion with regard to the appellant's request.

Firstly, the attention of the appellant was drawn to a certain ambiguity as to the extent of protection resulting from the introductory terms "*In a wireless communications system, a location determining system ...*". in claim 1 (Article 84 EPC 1973). The nature of the objection did, however, not prevent the Board from commenting on the issues of novelty and inventive step. While acknowledging that the claims, whether construed as relating to a location determining system *per se* or to the combination of such a system with a wireless communications system, defined new subject-matter, the Board in essence concurred with the finding of the examining division with regard to the requirement of an inventive step. In this respect, both approaches relied upon by the examining division, based on document D1 as closest prior art when combined respectively with the teaching of documents D2 or D3, were considered to be convincing. Moreover, the Board further observed that the same conclusion would have

applied when starting from document D3 as closest prior art adapted in view of the teaching of document D1.

VI. In a letter dated 15 May 2014, the appellant informed the Board that it would not participate to the oral proceedings which thus took place on 24 June 2014 in its absence. The appellant did not comment on the provisional opinion issued by the Board.

VII. Claim 1 of the appellant's request reads:

"*1. In a wireless communications system, a location determining system comprising:*

a first GPS receiver (106) in a fixed location relative to a base station (102), exact location coordinates (104) of said first GPS receiver (106) being fixed and predetermined;

a correction factor determination module (100) adapted to determine a correction factor, said correction factor being a difference between a GPS location determined by said first GPS receiver (106) and said predetermined exact location coordinates (104);

a second GPS receiver (204) in a mobile device (200), said mobile device comprising a combiner (210) adapted to combine said correction factor with a GPS location signal determined by said mobile device (200) to produce an error corrected GPS location signal accurate to within a few meters;

wherein said mobile device is CHARACTERIZED BY further comprising

a transmitter (202) adapted to transmit said error corrected GPS location signal from said mobile device during a telephone call."

Claims 2 to 5 are dependent claims.

Independent claim 6, erroneously numbered 7, reads:

"*7.[sic] A method of improving an accuracy of a GPS location in a wireless handset (200), comprising:*

receiving location information from a navigational satellite system to determine a mobile GPS location in said wireless handset (200);

determining a GPS correction factor (100) based on a difference between a GPS location determined by a fixed GPS receiver (106), and known exact location coordinates (104) of said fixed GPS receiver (106);

transmitting wirelessly said GPS correction factor (100) from a base station (102) to said wireless handset (200);

combining (210) at said wireless handset (200) a GPS location determined by said mobile GPS location (204) and said GPS correction factor (100) to generate an error corrected GPS location signal (210) accurate to within a few meters;

said method being CHARACTERIZED BY further comprising

transmitting (202) said error corrected GPS location signal (210) from said wireless handset (200) during a telephone call."

Claims 7 and 8 depend on claim 6.

Reasons for the Decision

1. *Applicable law*

This decision is issued after the entry into force of the EPC 2000 on 13 December 2007, whereas the application was filed before this date. Reference is

thus made to the relevant transitional provisions for the amended and new provisions of the EPC, from which it may be derived which Articles and Rules of the EPC 1973 are still applicable to the present application and which Articles and Rules of the EPC 2000 are to apply. When Articles or Rules of the former version of the EPC are cited, their citations are followed by the indication "*1973*" (cf. EPC, Citation practice).

2. *Admissibility*

The appeal complies with the requirements of Articles 106 to 108 EPC and Rule 99 EPC. It is, thus, admissible.

3. *Inventive step (Article 56 EPC 1973)*

It is noted that the following comments apply independently of the interpretation that can be made of the claim's wording, i.e. whether it is construed as relating to a location determining system *per se* or to the combination of such a system with a wireless communications system.

Document D3 discloses a location determining system in a wireless communications system (cf. column 2, lines 25-27). Concretely, document D3 discloses a mobile device incorporating a GPS receiver and being adapted to transmit location data to an interlocutor (cf. column 3, lines 52-63; column 9, line 57 - column 10, line 6).

Since the system of D3 shares a common purpose with the claimed system, i.e. transmitting location data to an interlocutor, and incorporates the same essential functionalities in terms of cellular communication and

determination of the mobile location as the claimed invention, it is considered to represent the closest prior art. In this respect, the Board considers that D3 constitutes an even better starting point for determining the inventive merits of the claimed invention than document D1 since it actually reproduces the main functionality of the claimed system of transmitting GPS location data from a mobile device during a telephone call.

The location determining system of claim 1 distinguishes from this known prior art in that:
- a correction factor determination module is provided in the wireless communications system to determine a correction factor, said correction factor being a difference between GPS location coordinates determined by a first GPS receiver at a fixed and predetermined location and the corresponding predetermined exact location coordinates;
- and in that the location signal transmitted from said mobile device during a telephone call is the error corrected GPS location signal obtained by combining the correction factor and GPS location signal determined by the mobile device.

The problem solved by the claimed invention consists in providing the called party (interlocutor) with more accurate information as to the location of the caller (cf. published application, paragraphs [0011], [0033]). This aspect is particularly relevant when dialing emergency telephone numbers (cf. paragraph [0003]).

Since the need to provide the user of a mobile subscriber unit with more accurate, i.e. corrected GPS data, is explicitly addressed in D1 (cf. paragraph [0001], [0006], [0007], it would have thus been obvious

for the skilled person to modify the system of D3 by incorporating the correction abilities provided in the system of D1. According to the teaching of document D1, a differential GPS location signal is achieved through computation of error offsets at the serving base station (cf. paragraph [0006]). The error information is periodically transmitted to the subscriber mobile unit and is combined with the information directly available from the GPS receiver in the mobile unit (cf. paragraph [0007], [00009]), as recited in claim 1. It follows that the system of D3 amended in the light of the GPS correction facilities disclosed in document D1 leads to a system as defined in claim 1.

The fact that in D3 the corrected data is to be transmitted to the called party and is thus not necessarily required by the actual user of the mobile unit does not affect the above finding. In this respect, the skilled person would have immediately recognised which benefits resulted from the fact that in D1 the corrected data is made available to the mobile unit.

For these reasons, the subject-matter of claim 1 is considered to derive in an obvious manner from the prior art and is thus not considered to involve an inventive step in the sense of Article 56 EPC 1973.

4. With the communication of 4 February 2014, the Board informed the appellant of the objection based on the combination of documents D3 and D1. The appellant waived the opportunity to present its comments in this respect by not filing a reply to the Board's communication and by not participating in the oral proceedings.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

R. Schumacher G. Assi

Decision electronically authenticated