BESCHWERDEKAMMERN DES EUROPÄISCHEN PATENTAMTS

BOARDS OF APPEAL OF THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPEEN DES BREVETS

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

Datasheet for the decision of 14 July 2011

Case Number: T 0921/09 - 3.4.01

Application Number: 99925551.6

Publication Number: 1073914

IPC: G01S 5/14

Language of the proceedings: EN

Title of invention:
Method and apparatus for determining time in a satellite positioning system

Patentee:
Snaptrack, Inc.

Opponent:
Nokia Corporation

Headword:
-

Relevant legal provisions:
-

Relevant legal provisions (EPC 1973):
EPC Art. 84

Keyword:
"Lack of clarity of amendments"

Decisions cited:
-

Catchword:
-

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0921/09 - 3.4.01

D E C I S I O N
of the Technical Board of Appeal 3.4.01
of 14 July 2011

Appellant: (Patent Proprietor)
Snaptrack, Inc.
Suite 250
4040 Moorpark Avenue
San Jose, CA 95117 (US)

Representative:
Heselberger, Johannes
Bardehle Pagenberg
Galileiplatz 1
D-81679 München (DE)

Respondent: (Opponent)
Nokia Corporation
Keilalahdentie 4
PO Box 226
FIN-02150 Espoo (FI)

Representative:
-

Decision under appeal:
Decision of the Opposition Division of the European Patent Office posted 11 December 2008 revoking European patent No. 1073914 pursuant to Article 101(3)(b) EPC.

Composition of the Board:

Chairman: B. Schachenmann
Members: H. Wolfrum
F. Neumann

Summary of Facts and Submissions

I. The contested European patent No. 1 073 914 arises from European patent application EP 99 925 551.6, which was published as international publication WO 99/053338.

II. The opposition was based on the grounds of Articles 100(a) EPC 1973 for lack of novelty and inventive step as well as on Articles 100(b) and 100(c) EPC 1973. In the course of the opposition proceedings the opposition was withdrawn. The opposition division, continuing the opposition proceedings of its own motion pursuant to Article 114(1), decided in oral proceedings on a main request concerning the patent as granted. Auxiliary requests were not admitted into the proceedings. In its decision, dispatched on 11 December 2008, the opposition division revoked the patent on the grounds that a method of determining a reference time as claimed by claim 1 of the patent as granted was not adequately disclosed in the description in order to be successfully carried out (Article 100(b) EPC 1973) and that the subject-matter of the independent claims 1 and 27 of the patent as granted lacked novelty (Article 100(a) EPC 1973 in combination with Articles 54(1) and (2) EPC 1973). The opposition division based its finding of insufficiency of disclosure on the fact that the (sole) equation for computing the reference time as given in the description was defective and that the correction of the error was not obvious.

III. The appellant (patent proprietor, Snaptrack, Inc.) lodged an appeal against the decision of the opposition division. The notice of appeal was received on 23 February 2009, a Monday, and the prescribed fee was

paid on the same day. On 21 April 2009 a statement of grounds of appeal was filed. The appellant requested, by way of a main request, that the decision under appeal be set aside and the opposition be rejected. Alternatively, the appellant requested that the patent be maintained in amended form according to sets of claims forming a first and a second auxiliary request, both filed with the statement of grounds of appeal. Moreover, the appellant requested reimbursement of the appeal fee due to an alleged substantial procedural violation on the part of the opposition division by not admitting auxiliary requests into the procedure. Finally, the appellant made an auxiliary request for oral proceedings.

IV. On 11 April 2011 the Board summoned to oral proceedings. In an annex to the summons pursuant to Article 15(1) RPBA, the Board expressed its preliminary view that it did not see a substantial procedural violation in the opposition division's conduct of the proceedings. Furthermore, the Board explained why, notwithstanding the appellant's argumentation, it tended to share the oppositions division's findings. In this context, the Board added further concerns with respect to the matter of sufficiency of disclosure. It was also indicated that it could become necessary to discuss matters of clarity for the auxiliary requests.

V. By letter of 14 June 2011, the appellant replaced its former requests by a new main request and a new auxiliary request. Further arguments in support of sufficiency of disclosure were given. Moreover, based on the amendments made with respect to the independent

claims of the patent as granted, arguments in support of novelty and inventive step were presented.

VI. Oral proceedings were held on 14 July 2011. The main points of discussion concerned the questions of added subject-matter (Article 123(2) EPC for the amendments made, of sufficiency of disclosure (Article 100(b) EPC 1973) and of clarity of the amended claims (Article 84 EPC 1973).

VII. As a result of the discussion, the appellant requested that the decision under appeal be set aside and that the patent be maintained in amended form on the basis of claims 1 to 30 filed in the oral proceedings. The request for reimbursement of the appeal fee was not maintained.

VIII. The independent claims of the appellant's request read as follows:

"1. A machine-implemented method for determining a reference time associated with a satellite positioning system, said method comprising:
initially estimating a position of an entity (100,853); and determining a set of relative velocities of a set of satellites relative to said entity; characterised by:
said position estimated of said entity being relative to said set of satellites, wherein said entity comprises a mobile SPS receiver which is combined with a mobile communication receiver and transmitter, said initial estimation utilizing a cellular site location information and being associated with a first time measurement, wherein said first time measurement and

said reference time differ by an offset; and based on said set of relative velocities of said set of satellites and said estimated position, determining said offset between said first time measurement and said reference time;
the method further comprising computing said offset by including said set of relative velocities of said set of satellites and corrections to said initial estimation of the position of said entity and a coarse correction and a fine correction to the first time measurement in a set of pseudorange residual computations."

"*23. An apparatus determining a reference time associated with a satellite positioning system, said apparatus comprising:*
a storage unit (9,707,733) to store a set of initial position values; and a processing unit (10,705,727) coupled to said storage unit (19,707,733), to determine *said offset;*
characterised in:
an entity (100, 853) comprising a mobile SPS receiver combined with a mobile communication receiver and transmitter, said initial position values indicate a relative position of said entity to a set of satellites, and wherein each of said set of initial position values utilize a cellular site location information regarding said entity and a time measurement that differs from said reference time by an offset; and said offset is determined based on said set of initial position values with an estimate of a set of relative velocities of said set of satellites;
wherein the determination comprises computing said offset by including said set of relative velocities of

said set of satellites and corrections to said initial position values and a coarse correction and a fine correction to the first time measurement in a set of pseudorange residual computations."

Claims 2 to 22 and 24 to 30 are dependent claims.

Reasons for the Decision

1. In the light of the entry into force of the EPC 2000, reference is made to Article 7(1), 2nd sentence of the Revision Act of 29 November 2000 ("Act revising the Convention on the Grant of European Patents (European Patent Convention) of 5 October 1973, last revised on 17 December 1991") and the transitional provisions for the amended and new provisions of the EPC (Decision of the Administrative Council of 28 June 2001), from which it may be derived which Articles of the EPC 1973 are still applicable and which Articles of the EPC 2000 shall apply.

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

3. The appellant's request was filed in the course of the oral proceedings and thus at a fairly late stage of the appeal proceedings. Nevertheless, the Board decided to admit the request into the proceedings taking into consideration that the request replaced all former requests on file and that the amendments proposed constituted an attempt to overcome objections under Article 100(b) EPC 1973 and Article 123(2) EPC, which

partly arose and/or were discussed in detail for the first time in the oral proceedings.

4. During the oral proceedings no conclusion was reached concerning the question of whether the amendments encompassed in the appellant's request overcame all concerns of added subject-matter and sufficiency of disclosure entertained by the Board in the discussions at the oral proceedings. However, in view of the fact that the outstanding issues in these respects could possibly have been resolved by further amendment, priority was given to the matter of clarity (Article 84 EPC 1973) of amendments which are comprised in the request on file.

4.1 As regards the clarity of the claim definitions, the critical point is the meaning of the term "*cellular site location information*" in the respective features "*said initial estimation utilizing a cellular site location information*" of claim 1 and "*wherein each of said set of initial position values utilize a cellular site location information regarding said entity*" of claim 23 under consideration. It was the use of cellular site location information which was seen by the appellant as the decisive difference for establishing novelty and inventive step over the cited prior art.

4.2 The term originates from the sentence "Thus, in one embodiment, cellular site location information is utilized to determine an initial estimate of the location of the SPS receive[r]." found in the second paragraph of page 9 of the application as published

(corresponding to paragraph [0024] of the patent as granted).

This passage constitutes an isolated piece of information, no further reference to or explanation of the cellular site location information being made anywhere in the application documents as filed or in the patent specification as to the origin of and its introduction into the process of estimating the position of the mobile SPS receiver.

Consequently, the nature and origin of "*cellular site location information*" remain obscure, as well as the manner in which such information would be made available in the claimed method and apparatus.

4.3 The appellant argued in writing and in the oral proceedings that, in view of the further amendment made to claims 1 and 23 according to which the mobile SPS receiver is combined with a mobile communication receiver and transmitter, the notional skilled person would immediately understand the word "cellular" to refer to the cells of a telecommunication network. In a telecommunications network any mobile receiver would know in which cell it was located so that this cellular site location information would be present in and readily available from a mobile SPS receiver equipped with the claimed mobile communication receiver and transmitter.

4.4 However, the specific embodiments comprised in the originally-filed application documents and in the patent specification do not support such an interpretation.

According to Table 1, which summarizes the only embodiment of the claimed subject-matter, *ie* of a machine-implemented method for determining a reference time associated with a satellite positioning system which makes use of satellite velocities, the mobile SPS receiver estimates its position with respect to a set of satellites by determining a set of pseudoranges (see also paragraphs [0016] to [0025] of the patent description) and sends this information to an SPS basestation. In order to be able to determine the set of pseudoranges, the mobile SPS receiver requires a time-of-flight estimate but no initial estimate of its position.

The SPS basestation carries out the necessary computations which finally result in the determination of the reference time, on the basis of which in turn the true position of the SPS receiver can be obtained. To this end, the SPS basestation first computes pseudorange residuals on the basis of an (initial) estimation of the true range. There is no suggestion that "cellular site location information" is involved in this estimation of the true range. Moreover, if the appellant's interpretation of this term were correct and cellular site location information were to be used for the calculation of the pseudorange residuals, the basestation would somehow have to know in which cell of a telecommunications network the SPS receiver is located. However, the application and patent documents are silent in this respect, the only information being disclosed in as being communicated from the SPS receiver to the basestation being the calculated pseudoranges. Therefore, it is not evident that the SPS

basestation obtains such knowledge at all. Instead, on a fair reading of the patent specification, the term "cellular site location information" referred to in paragraph [0024] could, for instance, be considered to refer to some position information regarding the location of the SPS basestation itself, such basestations also being arranged in a cellular network. There is no compelling reason to associate this term with positional information within a telecommunication network.

The remainder of the application description and patent specification refers to methods and apparatuses of determining the position of a mobile SPS receiver which do not fall under the terms of independent claims 1 and 23 on file.

4.5 In summary, the term "cellular site location information" has no clear and unambiguous meaning so that doubts arise as to what exactly would fall under the terms of the claims of the appellant's request on file. This deficiency is all the more significant as the use of cellular site location information was, in the appellant's view, the decisive feature which established novelty and inventive step for the claimed subject-matter (see chapter "B. The prior art" on pages 19 to 22 of the appellant's letter of 14 June 2011).

5. In conclusion, the Board has found that the appellant's request does not comply with the requirement of Article 84 EPC 1973 having regard to clarity and thus is not allowable.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar | The Chairman

R. Schumacher | B. Schachenmann