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**Datasheet for the decision  
of 27 June 2018**

**Case Number:** T 0904/14 - 3.5.07

**Application Number:** 01934225.2

**Publication Number:** 1366426

**IPC:** G06F17/00

**Language of the proceedings:** EN

**Title of invention:**

Location aware product placement and advertising

**Applicant:**

Nokia Technologies Oy

**Headword:**

Location aware product placement/NOKIA TECHNOLOGIES

**Relevant legal provisions:**

EPC Art. 56

**Keyword:**

Inventive step - all requests (no)

**Decisions cited:**

T 0641/00



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Case Number: T 0904/14 - 3.5.07

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.07**  
**of 27 June 2018**

**Appellant:** Nokia Technologies Oy  
(Applicant) Karaportti 3  
02610 Espoo (FI)

**Representative:** Swindell & Pearson Limited  
48 Friar Gate  
Derby DE1 1GY (GB)

**Decision under appeal:** **Decision of the Examining Division of the  
European Patent Office posted on 4 October 2013  
refusing European patent application No.  
01934225.2 pursuant to Article 97(2) EPC**

**Composition of the Board:**

**Chairman** R. Moufang  
**Members:** M. Jaedicke  
R. de Man

## Summary of Facts and Submissions

- I. The applicant (appellant), which at the time was Nokia Corporation, appealed against the decision of the Examining Division refusing European patent application No. 01934225.2, filed as international application PCT/IB01/00889 and published as WO 01/93070 A2. The application claims a priority date of 30 May 2000.
- II. In the course of the appeal proceedings, the application was transferred to Nokia Technologies Oy, which thereby obtained the status of appellant.
- III. The Examining Division decided that the subject-matter of the independent claims of the main request, and of the first, second and third auxiliary requests, lacked inventive step over the prior art disclosed in the following documents:

D5: US 5,929,849, published on 27 July 1999; and  
D1: WO 00/29979, published on 25 May 2000.

The Examining Division considered some of the claimed features to be non-technical aspects.

Moreover, it decided that the subject-matter of claim 11 of the main request, and of the first, second and third auxiliary requests, contained added subject-matter extending beyond the content of the original application.

The Examining Division also decided, pursuant to Rule 137(3) EPC, not to admit the fourth and fifth auxiliary requests and a further auxiliary request filed in reply

to its summons.

- IV. In its statement of grounds of appeal, the appellant requested that the decision be set aside and that a patent be granted on the basis of one of the main request and the first to fifth auxiliary requests considered in the contested decision or of one of the sixth to eleventh auxiliary requests defined in the grounds of appeal. It stated that it was prepared to cancel the main request and the first to fifth auxiliary requests and replace them with the sixth to eleventh auxiliary requests if the Board were minded to uphold the Examining Division's objection under Article 123(2) EPC. Moreover, it requested reimbursement of the appeal fee because the procedure before the Examining Division had been affected by procedural deficiencies.
- V. In a communication under Article 15(1) RPBA accompanying a summons to oral proceedings, the Board *inter alia* expressed its provisional opinion that the subject-matter of claim 1 of all requests lacked inventive step in view of document D5 when combined with document D1. In addition, it expressed doubts that the requested reimbursement of the appeal fee was appropriate.
- VI. By letter of 31 May 2018, the appellant withdrew its request for oral proceedings. It made no substantive comments on the Board's communication.
- VII. Oral proceedings were held as scheduled in the absence of the appellant. At the end of the oral proceedings, the chairman pronounced the Board's decision.

VIII. Claim 1 of the main request reads as follows:

"A method, comprising:

receiving, at a mobile terminal (153), a video signal which includes a link; and

determining if a user of the mobile terminal (153) clicks on the link:

if it has been determined that the user clicked on the link, triggering provision of the location information of the mobile terminal (153) to a server (130); and

receiving, at the mobile terminal (153) from the server (130), a location specific advertisement corresponding to the location of the mobile terminal (153)."

IX. Claim 1 of the first auxiliary request reads:

"A method, comprising:

receiving, at a mobile terminal (153), a video signal which includes a link; and

determining if a user of the mobile terminal (153) clicks on the link:

if it has been determined that the user clicked on the link, triggering provision of the location information of the mobile terminal (153) to a server (130) and selection or generation at the server (130) of a location specific advertisement corresponding to the provided location of the mobile terminal (153);

wherein the location information indicates the location of the mobile terminal (153); and

receiving, at the mobile terminal (153) from the server (130), the selected or generated location specific advertisement corresponding to the location of the mobile terminal (153)."

- X. Claim 1 according to the second auxiliary request is derived from claim 1 of the main request by adding the text "that has a location that changes" after "receiving, at a mobile terminal (153)", by adding the text "wherein the location information informs the server of a current location of the mobile terminal" after "to a server (130),", by adding the word "personalized" before "location specific advertisement" and by adding the word "current" before "location of the mobile terminal (153)".
  
- XI. Claim 1 according to the third auxiliary request is derived from claim 1 of the first auxiliary request by adding the text "that has a location that changes" after "receiving, at a mobile terminal (153)" and by adding the word "personalized" before "location specific advertisement" and before "selected or generated location specific advertisement".
  
- XII. Claim 1 according to the fourth auxiliary request differs from claim 1 of the main request in that it replaces the text "mobile terminal (153)" with "mobile terminal of a Public Land Mobile Network (PLMN)".
  
- XIII. Claim 1 according to the fifth auxiliary request differs from claim 1 of the main request in that it replaces the text "mobile terminal (153)" with "mobile terminal of a mobile communications network".
  
- XIV. Claim 1 according to the sixth to eleventh auxiliary requests is identical to claim 1 of the main to fifth auxiliary requests respectively, the sixth to eleventh auxiliary requests making amendments only to claim 11.
  
- XV. The appellant's arguments where relevant to the decision are discussed in detail below.

## **Reasons for the Decision**

1. The appeal complies with the provisions referred to in Rule 101 EPC and is therefore admissible.

### **The invention**

2. The application relates to a technique for selectively providing advertising to mobile terminals based on the location of the mobile terminals (description, page 1, first paragraph). According to the application, banner advertisements were generally used on websites, but were inefficient and not particularly cost-effective. Consequently, advertisers utilised the internet for targeted advertising based on characteristics of the users such as their geographical location, age, gender or language (description, page 1, paragraph 3, to page 2, paragraph 1).

The application, taking advantage of recent improvements in high-speed internet connections and high-speed data services to mobile terminals, proposes placing products as active hypertext links in images and streaming internet video so that the viewer can click on the position of the product in the image or video to link to information about the product. When the user clicks on the link, he is directed to a website where the product is represented and local resellers are listed for immediate purchase of the product, the website being personalised according to the geographical location of the mobile terminal (page 2, paragraphs 2 to 4). The application describes various embodiments, using interactive betting as an

example of interactive content (page 4, paragraph 2).

### **Admission of requests**

3. In the exercise of its own discretion under Article 12(4) RPBA, the Board admits the fourth to eleventh auxiliary requests into the proceedings, since they were all submitted with the grounds of appeal, i.e. at an early stage of the appeal proceedings. The fourth and fifth auxiliary requests are merely further attempts to specify what is meant by a "mobile terminal". The sixth to eleventh auxiliary requests amend only claim 11 to address an objection under Article 123(2) EPC. The new set of requests constitutes a reasonable and streamlined attempt by the appellant to obtain a decision on the patentability of that subject-matter which it considers to be the core of the invention, and the Board is in a position to deal with all these requests without any difficulty.

### **Main request - inventive step**

4. Claim 1 of the main request relates to a method which comprises the following features itemised by the Board:
  - (a) receiving, at a mobile terminal, a video signal which includes a link; and
  - (b) determining if a user of the mobile terminal clicks on the link:
    - (i) if it has been determined that the user clicked on the link, triggering provision of the location information of the mobile terminal (153) to a server (130); and
    - (ii) receiving, at the mobile terminal (153) from the server (130), a location-specific



advertisement corresponding to the location of the mobile terminal (153).

5. The Board agrees with the Examining Division that document D5 is a suitable starting point. It discloses an integration of the techniques of web browsing and TV transmission to provide a method and apparatus for a viewer to very quickly garner maximum information about entities of interest seen in TV transmissions, for example about products advertised (D5, column 2, lines 52 to 59).

D5 discloses a system for TV transmission and display of television programming, comprising a source, such as a broadcast transmitter broadcasting a TV signal or a computer apparatus retrieving and transmitting a data stream from a hard disk drive, providing a data stream having image frame data in one region and a dynamic internet Universal Resource Locator (URL) in a separate region, the URL being related to an image entity in a display provided by the image frame data. The system comprises an apparatus adapted for receiving and displaying the image frame data on a display monitor, the apparatus also comprising an internet browser. In this embodiment the receiver strips the URL from the region not comprising the image frame data, activates the internet browser, accesses a web page associated with the URL, and displays the web page on the display monitor (D5, column 3, lines 10 to 40).

Document D5 also discloses a method for accessing additional information related to an image entity in a video display, comprising steps of:

- associating the image entity with a dynamic URL transmitted between frames in a data stream including image frames for the video display;

- selecting the entity in the video display by user input (preferably by cursor manipulation and selection with a pointer device);
- accessing the internet via a network interface module in response to the user input, and connecting to the data source associated with the URL;
- downloading a web page from the data source; and displaying the web page in the video display (D5, column 4, lines 35 to 51).

6. As document D5 discloses an internet-enabled TV device, claim 1 differs from D5 in that it refers to a mobile terminal instead of a stationary terminal. As the terminal of D5 receives a video signal with a link (a URL), the Board considers that D5 discloses feature (a) of claim 1 - apart from the terminal being mobile. As the Board considers that the step of selecting in the method disclosed in D5 can be regarded as clicking on a link, D5 at least implicitly also discloses feature (b) of claim 1, with the difference that the user's terminal is not a mobile terminal. Moreover, D5 discloses that the terminal provides the URL in response to clicking on the link to the data source, which is a server on the world wide web (D5, column 6, lines 8 to 10), over the network and downloads a web page from the data source.

Consequently, D5 also discloses the following aspects of features (b)(i) and (b)(ii) (marked up by the Board as follows: bold indicating added aspects, strikethrough indicating deleted aspects):

- (i) if it has been determined that the user clicked on the link, triggering provision of ~~the location information of~~ **the URL from**

the mobile terminal (153) to a server (130); and

- (ii) receiving, at the mobile terminal (153) from the server (130), a ~~location-specific advertisement corresponding to the location of the mobile terminal (153)~~ **web page**.

7. The Board agrees with the appellant that document D5 does not disclose that a location-specific advertisement corresponding to the location of the terminal is received or that location information is provided to the server. The Examining Division referred to column 8, lines 23 to 37, of D5, but the Board interprets this passage as disclosing the presentation of a web page serving as information portal from which users may obtain information of interest to them. This information portal may also include information about locations near to the user, but the cited passage of D5 does not disclose that the server provides information specifically selected in response to a transmitted location of the user or that location information is transmitted with the URL. Document D5 discloses in column 8, lines 38 to 43, that users can send information to the server via input fields if the terminal has input capability, but it fails to disclose that users enter their location in an input field for transfer to the server.
8. Consequently, the Board considers that claim 1 differs from document D5 in the use of a mobile terminal, in the provision of location information in reaction to clicking on the link and in the provision of a location-specific advertisement to the terminal.
9. In its statement of grounds of appeal, the appellant argued that the subject-matter of claim 1 provided the

advantageous technical effect of more flexibly controlling the content provided to a user in response to user selection of a link within a video.

10. However, the Board considers that the provision of a location-specific advertisement is not a technical effect. In the present case, the underlying business problem is how to provide location-specific advertisements to users located in an area where the advertisement is potentially interesting. This problem is formulated by the business person. According to the established case law of the boards of appeal, when assessing inventive step in accordance with the problem-and-solution approach, an aim to be achieved in a non-technical field may legitimately be added to the problem as a constraint to be met (see decision T 641/00, OJ EPO 2003, 352). Consequently, the requirement to provide location-specific advertising to users is given to the skilled person tasked with providing an implementation.

The Board further notes that the use of a mobile terminal improves the availability of the TV application when the user moves around.

11. In view of the above, the problem to be solved can be formulated as how to provide users moving around with the TV application functionality of D5, including location-specific advertising.
12. The Board considers that the use of a mobile terminal to enable users of the application to move around was obvious at the priority date, since mobile terminals such as notebooks, laptops, personal digital assistants, etc. were well-known. For example, document D1 on page 3, lines 1 to 14, mentions Nokia's

"Communicator" as a known mobile device with keyboard and display which was able to access a remote database server. As to the availability of TV/browser functionality, the application discloses the following: "Commercial applications such as Inet solution enable television/browser functionality" (page 5, last paragraph). As there is no further disclosure in the application explaining how such functionality is implemented for mobile terminals, the Board has no reason to doubt that the skilled person was able to provide this functionality for mobile terminals without the exercise of inventive skill.

13. As to the implementation of location-based advertising, the skilled person would immediately consider the claimed solution, as it is evident that the web server somehow needs to obtain the location of the requesting client in order to provide location-specific information. It is straightforward to instruct the client, i.e. the terminal, to provide its location to the server (e.g. the client has input means allowing the user to provide a location). As the claim is devoid of any technical details about how the location is determined, how location-dependent information is selected at the server, etc., the skilled person could and would arrive at the claimed solution without the exercise of inventive skill.

As an alternative to the user entering the location, it was known from document D1 to provide location information to a search engine over the internet, in order to retrieve location-dependent results from the server (D1, page 1, lines 9 to 12, page 8, lines 11 to 15). D1 also explains that it was known in telecommunication networks such as the Universal Mobile Telecommunications System (UMTS) or the Global System

for Mobile Communications (GSM) how to determine the location of a mobile terminal within a cellular network (D1, page 8, lines 11 to 25). Hence, the skilled person, when starting from document D5, would have found the solution in document D1.

14. In its statement of grounds of appeal, the appellant requested evidence supporting the Examining Division's finding that the provision of location information of a mobile terminal to a server was well-known.

However, such evidence is not necessary in view of the Board's reasoning presented above.

15. It follows that claim 1 of the main request lacks inventive step (Articles 52(1) and 56 EPC).

**First auxiliary request - inventive step**

16. Claim 1 according to the first auxiliary request amends features (b) (i) and (b) (ii) of claim 1 of the main request as follows, additions to claim 1 of the main request being highlighted in italics:

- (i) if it has been determined that the user clicked on the link, triggering provision of the location information of the mobile terminal (153) to a server (130) *and selection or generation at the server (130) of a location-specific advertisement corresponding to the provided location of the mobile terminal (153),*
- (ii) *wherein the location information indicates the location of the mobile terminal (153);*  
and

(iii) receiving, at the mobile terminal (153) from the server (130), *the selected or generated* location-specific advertisement corresponding to the location of the mobile terminal (153).

17. The Board considers that amended feature (ii) merely provides an explicit definition of the expression "location-specific information" that does not change the normal meaning of this expression and hence cannot change the Board's assessment of inventive step.

The amendments in features (i) and (iii) merely reflect the need to select or generate the advertisement provided in reply to the requested URL in order to adapt the advertisement to the location as required by the formulated problem. Moreover, content selection and generation at a web server were known from document D1 (page 3, paragraphs 1 and 2; page 8, paragraph 1) and were well-known for web servers in general. Hence, the skilled person would arrive at a solution including the amended features without the exercise of inventive skill.

18. In its statement of grounds of appeal, the appellant argued that the amendments emphasised that content was produced dynamically and was not predetermined by the link and that the content was pushed to the client. The Board does not see that the content is pushed to the terminal, as it is provided as a direct reaction to clicking on the link. In other words, the content is pulled, not pushed. Moreover, it is self-evident that the content is produced dynamically, as the provision of static content is not an appropriate solution for providing location-specific information to a mobile

terminal with a changing location.

19. It follows that claim 1 of the first auxiliary request lacks inventive step (Articles 52(1) and 56 EPC).

**Second auxiliary request - inventive step**

20. Claim 1 according to the second auxiliary request amends claim 1 of the main request by adding that (i) the mobile terminal *has a location that changes*, (ii) *the location information informs the server of a current location of the mobile terminal* and (iii) the location-specific advertisement is *personalised*.

21. Amendment (i) specifies that the terminal has no fixed location, for example because it is portable and the user moves around with the terminal. As the Board, in its above reasoning for the main request, has already considered the use of a mobile terminal as being obvious, amendment (i) cannot lead to a different assessment of inventive step.

Amendment (ii) defines the meaning of the expression "location information", but this clarification corresponds to the Board's interpretation of the subject-matter of claim 1 of the main request.

Finally, the Board considers that amendment (iii) does not change the claimed subject-matter in substance, as according to the description, page 2, penultimate paragraph, personalisation means providing a location-specific advertisement.

22. It follows that claim 1 of the second auxiliary request lacks inventive step (Articles 52(1) and 56 EPC).



**Third auxiliary request - inventive step**

23. Claim 1 according to the third auxiliary request essentially introduces the amendments to features (i) and (iii) of the first auxiliary request into claim 1 of the second auxiliary request: in substance, it adds that the content is generated or selected at the server. Moreover, the term "current" has been removed in relation to the location of the terminal.
24. As already explained above with regard to the first auxiliary request, the Board considers that the amendment relating to selection or generation at the server does not add anything going beyond the normal skills of the skilled person. Removal of the term "current" broadens the claim. Consequently, claim 1 of the third auxiliary request lacks inventive step (Articles 52(1) and 56 EPC).

**Fourth and fifth auxiliary requests - inventive step**

25. Claim 1 according to the fourth auxiliary request amends claim 1 of the main request by specifying that the mobile terminal is "of a Public Land Mobile Network (PLMN)". Claim 1 according to the fifth auxiliary request amends claim 1 of the main request by specifying that the mobile terminal is "of a mobile communications network".
26. The Board considers that the amendments to the fourth and fifth auxiliary requests specify obvious implementation options for the mobile terminal.

That the terminal is of a mobile communications network is the obvious consequence of the need to support data transfers from a mobile terminal when users move around.

A PLMN as specified in the fourth auxiliary request is merely one example of a known mobile communications network. Selecting such a network was an obvious choice, as these networks were well known to the skilled person (see description, page 14, last paragraph; D1, which refers on page 8, last paragraph, to UMTS and GSM networks).

27. In its statement of grounds of appeal (point 4.6), the appellant argued that these requests defined the mobile terminal with greater precision.

The Board agrees, but sees no inventive contribution in the limitation to known types of network.

28. It follows that claim 1 of the fourth and fifth auxiliary requests lacks inventive step (Articles 52(1) and 56 EPC).

#### **Sixth to eleventh auxiliary requests - inventive step**

29. The above objections for lack of inventive step to claim 1 of the main request and first to fifth auxiliary requests also apply to claim 1 of the sixth to eleventh auxiliary requests, as claim 1 of the sixth to eleventh auxiliary requests is the same as claim 1 of the corresponding higher-ranking requests.

### **Conclusion**

30. As none of the appellant's requests can form the basis for the grant of a patent, the appeal is to be dismissed.

### **Reimbursement of the appeal fee**

31. As to the appellant's request for reimbursement of the appeal fee under Rule 103(1)(a) EPC, the Board considers that in the present case such reimbursement is already excluded on the ground that one condition for a possible reimbursement is that the appeal is at least partly successful.

**Order**

**For these reasons it is decided that:**

1. The appeal is dismissed.
2. The request for reimbursement of the appeal fee is refused.

The Registrar:

The Chairman:



G. Nachtigall

R. Moufang

Decision electronically authenticated