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Datasheet for the decision
of 15 September 2017

Case Number: T 0752/11 - 3.5.01
Application Number: 07857642.8
Publication Number: 2092472
IPC: G06Q20/00
Language of the proceedings: EN

Title of invention:
METHOD AND APPARATUS FOR CREATING AND SENDING A CODE GRID TO A PORTABLE COMMUNICATION DEVICE

Applicant:
Mobill Scandinavia AB

Headword:
CREATING AND SENDING A CODE GRID TO A PORTABLE COMMUNICATION DEVICE/MOBILL

Relevant legal provisions:
EPC Art. 56
RPBA Art. 15(3)
Keyword:
Summons to oral proceedings - non-attendance of party
Inventive step - series of characters used as locator section
in graphical code (no - obvious) - main request (no) -
auxiliary request (no)

Decisions cited:

Catchword:
Case Number: T 0752/11 - 3.5.01

DECISION
of Technical Board of Appeal 3.5.01
of 15 September 2017

Appellant: Mobill Scandinavia AB
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted on 17 November 2010 refusing European patent application No. 07857642.8 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman W. Chandler
Members: M. Höhn
I. Beckedorf
Summary of Facts and Submissions

I. This appeal is against the decision of the examining division refusing European patent application No. 07857642.8 pursuant to Article 97(2) EPC on the ground of lack of inventive step with regard to prior-art publications:

D1: WO 2005083640 A1,
D6: EP 0564708 A2 and

II. The appellant requested that the appealed decision be set aside and that a patent be granted on the basis of the main request or the auxiliary request as submitted on 17 March 2011 with the statement setting out the grounds of appeal.

III. In its communication, subsequent to the summons to oral proceedings, the Board further referred to D4 (GB2361570 A) mentioned in the Search Report as pertinent prior art and expressed its preliminary opinion that all requests lacked inventive step.

IV. In a reply, the appellant informed the Board that neither the applicant nor the professional representative would be attending the oral proceedings.

V. Oral proceedings were held on 15 September 2017 in absentia. After due consideration of the appellant's arguments the Chair announced the decision.

VI. Independent claim 1 according to the main request reads as follows:
"1. A method for sending a code grid representing an indication of payment for a good or service from a service provider, to a customer's portable communication device using SMS messaging, comprising the steps of:
receiving a request from a customer to purchase good or service (601);
characterized by the steps of:
creating the code grid (603,605) representing an indication of payment for a good or service, wherein the code grid consists of a non overlapping data grid (401) and locator section (403);
sending the code grid, wherein said data grid consists of a graphical representation of a numeric code which indicates that the customer has paid for the good or service, to the customer's portable communication device in an SMS message (607) for display as a graphical representation on a display screen of the portable communication device, wherein the locator section is a set series of characters appearing along two complete and adjacent sides of the code grid to direct a reading apparatus, so that the location of the data grid consisting of a matrix of characters, can be recognized, and that the data grid can be read and interpreted by the reading apparatus to obtain the numeric code".

Claim 1 of the auxiliary request essentially adds to the main request the additional feature that the locator section is a set series of characters appearing along the left side and the bottom side of the code grid to direct a reading apparatus.

VII. The present requests correspond to the second and third auxiliary requests in the decision under appeal. The
examining division essentially argued that the subject-matter of independent claim 1 of those requests was rendered obvious in view of D1 combined with either D6 or D8. In particular the 2D bar code as known from D8 (see figure 2B) corresponded to the claimed code grid.

The code grid of D1 (see figure 1) was also a matrix consisting of a non-overlapping data grid and locator section and consisted of a graphical representation of a numeric code. The characters of the data grid of D1 represented a numeric value, as in the claimed data grid. By solving the problem of implementing an alternative locator section so that data could be recognised by the reading apparatus, the skilled person (skilled in code scanning techniques) would also be motivated to consider documents such as D6 and D8. The 2D-bar code was also a graphical representation of a numeric code consisting of characters having the form of a white or black square. A symbol or character was only a matter of agreement between persons, a white square and a black square were therefore also considered symbols or characters. Therefore the skilled person would also consider documents such as D6 and D8 in order to see how the locator section is configured in the code grid.

Furthermore, it was argued that regarding the alleged problem of efficient scanning, no details in the claims (nor in the application) could be found about the reading apparatus (e.g. resolution, scanning algorithm, ...), about the resolution of the display of the mobile phone, about the size and type of the characters, the distance between the characters, etc. The effect of efficient recognition was therefore speculative, supported neither by the features of the claims nor by the features found in the description.
VIII. The appellant essentially argued that D1 did not disclose that the code grid consisted of a non-overlapping data grid and locator sections, wherein the locator section when displayed on a display screen of a portable communication device was arranged in a way to direct a reading apparatus, so that the location of the data grid consisting of a matrix of characters could be recognized, and that the data grid could be read and interpreted by the reading apparatus to obtain the numeric code.

A technical effect of this was an efficient recognition and interpretation of a graphical representation of a numeric code on a display screen. The objective technical problem was hence how to generate a code grid that made recognition and interpretation of a graphical representation of a numeric code more efficient. If a skilled person faced with this problem would consider D1, he would see that different marker characters could be used to enable more accurate estimation of horizontal character position, or that the last line of the encoding may be marked using a combination of characters to enable possible extension of the code (see D1, page 19, lines 11-18).

The skilled person would however see no hint or suggestion that ticket information encoded for transmission was anything but a multi set code grid comprising several sets of alphanumeric characters, each line bounded by special marker characters, with the sets separated by distinctive marker characters that have to be recognized by means of the three sub-methods.
Nor would the skilled person see any suggestion to generate a code grid requiring a less complex method of recognition and interpretation as the frame rate and data capture speed must be sufficiently fast to transmit colour images of various types of mobile phone screens. In particular, SMS messaging was a prerequisite in D1 and consequently an essential feature which was incompatible with 2D-barcodes according to the teaching of D6 or D8. A skilled person in the art would not find a solution according to the claimed invention by using the additional knowledge in any of the cited prior art documents. For example, neither D6 nor D8 was based on a graphical representation of a numeric code consisting of a matrix of characters. The skilled person in view of this problem could but would not consider D6 or D8.

**Reasons for the Decision**

Non-attendance at oral proceedings

1. The Board was informed that the appellant would not be attending the oral proceedings. The Board nonetheless considered it expedient to maintain the date set for oral proceedings. Nobody attended on behalf of the appellant.

Article 15(3) RPBA, in conjunction with Rule 115(2) EPC, stipulates that the Board is not obliged to delay any step in the proceedings, including its decision, by reason only of the absence at the oral
proceedings of any party duly summoned who may then be treated as relying only on its written case.

Hence, the Board was in a position to announce a decision at the end of the oral proceedings that met the requirements of the appellant's right to be heard.

Main request

2. Article 56 EPC - Inventive step

The Board agrees with the decision under appeal that the subject-matter of independent claim 1 lacks an inventive step. The Board essentially concurs with the reasoning in the contested decision and in addition refers to D4 mentioned in the Search Report as pertinent prior art.

2.1 Document D1 discloses:

A method for sending a code grid representing an indication of payment for a good or service from a service provider to a customer's portable communication device using SMS messaging (see abstract; figures 1 and 12), comprising the steps of:

- receiving a request from a customer to purchase a good or service (page 15, lines 7-32);

- creating the code grid representing an indication of payment for a good or a service (page 15, lines 7-17; page 16, lines 5-9; page 4, line 33 - page 6, line 16; figure 1), wherein the code grid comprises a non overlapping data grid (figure 1: Ref.15) and locator section (figure 1: Ref.16; figure 2: Ref.24);
-sending the code grid, said data grid comprising a
graphical representation of a numeric code which
indicates that the customer has paid for the good or
service (figure 12; page 15, line 31 - page 16, line
9), to the customer's portable communication device in
an SMS message (page 16, lines 23-25) for display as a
graphical representation on a display screen of the
portable communication device (figure 4, 12), wherein
the locator section is a set series of characters to
direct a reading apparatus, so that the location of the
data grid consisting of a matrix of characters can be
recognized by the reading apparatus (figure 2: Ref.20
and 24; figures 3-6; page 4, lines 12-32; page 8, line
20 - page 9, line 13; page 17, line 23 - page 18, line
11; page 19, lines 11-18).

2.2 The subject-matter of claim 1 differs from the teaching
of D1 in that the locator section is a set series of
characters appearing along two complete and adjacent
sides of the code grid to direct a reading apparatus.

2.3 Starting from D1 the objective problem underlying the
distinguishing features is regarded as implementing a
code grid with a locator section that facilitates
recognition and interpretation of a graphical
representation of a numeric code more efficiently. This
is in accordance with the appellant's formulation (see
page 6, second paragraph of the statement setting out
the grounds of appeal).

2.4 According to the present application, the code grid is
a matrix which is a binary representation of an integer
(see page 10, lines 6 and 7).
At the time of D1, 2D-barcodes were already known in the art, e.g. from D4 (figure 5B), D6 (figure 2) or D8 (figure 2B). These codes are considered to be within the specification of a code grid according to claim 1, particularly since a locator section appears along two complete and adjacent sides of the code grid to direct a reading apparatus. The advantages regarding efficiency of scanning such codes with bar code readers were known in the art and their use was therefore apparent to the skilled person. This is exemplified by D4, which mentions that code readers for such codes were known in the art to have the advantage of being reliable and relatively easy to use (see D4, page 9, lines 19 to 20), i.e. efficient. When looking for efficient scanning, the skilled person would consequently also have considered the use of 2D barcodes which fall under the specification of a code grid in claim 1.

2.5 Figure 4 of D4 illustrates a procedure by which a numeric code (PNR code) contained in an SMS message may be converted into an optical code format. Hence, D4 also deals with SMS transmission and is therefore compatible with the teaching of D1. The skilled person when looking for a solution of the objective technical problem would therefore consider D4.

According to D4, once the PNR code is converted into bar-code format the application program commands the mobile phone to display the optical code on the display screen 10, step 3 for scanning the bar code with bar-code reader 65. In figure 5b the optical code 41 is a 2-D dot-code. Such 2-D dot-codes are able to represent a plurality of characters. Therefore, in addition to the PNR, the application programme may be arranged to encode in the optical code other ticket information
contained in the original SMS message. In principle, all of the ticket information listed on page 4 of D4 may be included in the message and encoded for display in a 2D dot-code such as the one illustrated in figure 5b (see D4, page 10).

2.6 The fact that D4 discloses embodiments in which the ticket information is sent to the mobile station as a text message using SMS shows that SMS transmission does not exclude the use of 2D barcodes, in contrast to the appellant's argument (see page 7, second paragraph of the statement setting out the grounds of appeal).

2.7 The skilled person would therefore combine the teachings of D1 and D4, and thereby would arrive at the subject-matter of claim 1 without the need for inventive skills.

2.8 For the same reasons (see point 2.6), the Board considers the combination of D1 with the teaching of either D6 or D8, both also disclosing 2D barcodes, obvious as well.

2.9 The subject-matter of claim 1 therefore does not involve an inventive step over D1 combined with either D4, D6 or D8.

The same reasoning applies, *mutatis mutandis*, to corresponding independent claims 14, 15 and 16.

Auxiliary request

3. Claim 1 according to this request comprises the additional feature that the locator section is a set series of characters appearing along the left side and
the bottom side of the code grid to direct a reading apparatus.

3.1 This does not further delimit the independent claims with regard to the prior art publications discussed above. The 2D-barcodes as disclosed in D4 (figure 5B), D6 (figure 2) or D8 (figure 2B) are designed exactly in this way.

The additional features therefore do not render the claimed subject-matter of the independent claims non-obvious.

3.2 The subject-matter of independent claims 1, 14, 15 and 16 of this request therefore does not involve an inventive step (Article 56 EPC) over D1 combined with either D4, D6 or D8.

4. Thus, none of the requests fulfils the requirements of the EPC.

Order

For these reasons it is decided that:

The appeal is dismissed.
The Registrar: T. Buschek
The Chairman: W. Chandler

Decision electronically authenticated