Datasheet for the decision of 2 February 2016

Case Number: T 1584/13 - 3.5.06
Application Number: 03254057.7
Publication Number: 1443379
IPC: G06F1/00
Language of the proceedings: EN

Title of invention:
Mobile communication system and mobile terminal having function of desactivating mobile communication viruses and method thereof

Applicant:
Curitel Communications, Inc.

Headword:
Virus monitoring/CURITEL

Relevant legal provisions:
EPC 1973 Art. 56

Keyword:
Inventive step (no)

Decisions cited:
Catchword:
Case Number: T 1584/13 - 3.5.06

DECISION of Technical Board of Appeal 3.5.06
of 2 February 2016

Appellant: Curitel Communications, Inc.
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(Applicant)

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Decision under appeal: Decision of the Examining Division of the European Patent Office posted on 3 January 2013 refusing European patent application No. 03254057.7 pursuant to Article 97(2) EPC.

Composition of the Board:
Chairman W. Sekretaruk
Members: M. Müller
A. Teale
Summary of Facts and Submissions

I. The appeal lies against the decision of the examining division, with reasons dispatched on 3 January 2013, to refuse European patent application No. 03 254 057.7 for lack of an inventive step in view of the following documents:

D1: US 6 240 530 B1
D5: US 5 889 943 A.

II. Notice of appeal was filed on 27 February 2013, the appeal fee being paid on the same day. A statement of grounds of appeal was received on 3 May 2013. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims pursued in the oral proceedings of 6 December 2012 before the examining division and re-filed with the grounds of appeal, that is based on claims 1-11 according to the main request and claims 1-10 according to the auxiliary request. The appellant also made an auxiliary request for oral proceedings.

III. In an annex to a summons to oral proceedings, the board informed the appellant of its preliminary opinion that the independent claims of both requests, namely 1 and 8 of the main request and 1 and 7 of the auxiliary request, lack inventive step over D1, D4 and D5, Article 56 EPC 1973.

IV. In response to the summons, the appellant did not file either amendments or arguments. Instead, with a letter dated 23 December 2015, it withdrew its request for oral
proceedings, informed the board that no one would be attending the oral proceedings in the name of the applicant, and stated that it expected to receive "a decision on basis of the state of the file".

V. The board then cancelled the oral proceedings.

VI. Claim 1 according to the main request reads as follows:

"A method for inactivating viruses in a mobile communication system having a plurality of mobile terminals (111, 112, 113, 114), comprising the following steps:

a) at a virus monitoring unit associated with the mobile communication system:
   detecting virus infection of data received from at least one first mobile terminal (111; 112; 113; 114), wherein the first mobile terminal has a virus vaccine program stored therein;

b) at the virus monitoring unit:
   analyzing virus information of the detected virus infection when data are virus infected

c) at the virus monitoring unit:
   choosing suitable one of virus vaccine programs that are stored in a database according to the virus information, and
   curing the data received from the first mobile terminal (111; 112; 113; 114) to inactivate the virus,
   wherein the cured data is transmitted to a destination mobile terminal;

d) at the virus monitoring unit:
   notifying said first mobile terminal about virus infection;

e) at the first mobile terminal (111; 112; 113; 114):
receiving the virus infection notification from the virus monitoring unit and, in response to receiving said virus infection notification, detecting a virus infection of the first mobile terminal to inactivate viruses by using said virus vaccine program stored therein; and

f) transmitting a vaccine request message to the virus monitoring unit to receive a virus vaccine program suitable for the detected virus to thereby inactivate the virus by using the received virus vaccine program when the virus vaccine program previously stored in the mobile terminal can not inactivate the virus."

Claim 1 according to the auxiliary request is identical to claim 1 of the main request except for the following text added at the end:

"... , wherein the vaccine request message includes vaccine program information, virus information and capability information of the first mobile terminal."

Reasons for the Decision

1. The following reasons are based on the board's analysis presented in the annex to the summons to oral proceedings, on which the appellant chose not to comment.

The invention

2. The application relates to virus protection for mobile terminals, and more specifically to the protection of data in transit and the provision of up-to-date "vaccine" programs to mobile terminals.
2.1 The application relates to a number of mobile phones which communicate via base stations and a mobile switching center (see fig. 1). So called "vaccine" programs are installed on the mobile devices. The base stations and the mobile switching center, but not the mobile devices, have access to a database of vaccine programs and a virus monitoring unit (VMU).

2.2 When data is transmitted from one mobile device to another, it is determined (by the VMU) whether the data is infected. The suitable vaccine is retrieved from the DB and applied, and the "cured" data is forwarded. In passing, it is noted that the term "vaccine" appears to be an inappropriate metaphor for a program which is used as a cure and after an infection has been diagnosed rather than before and for prophylaxis. The receiving mobile device is also informed about the infection. The mobile device then checks whether a suitable vaccine is locally available and, if not, requests it from the VMU via the base station.

Claim construction

3. Claim 1 of both requests contains a few linguistically imprecise and ambiguous formulations which might be considered to render the claim unclear. The board considers however that claim 1 is clear enough to allow an assessment of inventive step. To this end, claim 1 is construed as follows.

3.1 Step e) of claim 1 specifies that "in response to [a] virus infection notification", "a virus infection" is detected and later, in step f), reference is made to the "detected virus". The board takes it that the virus detected at the mobile device is meant to be the same as
the one detected in the transmitted data and notified to the mobile device.

3.2 Step e) of claim 1 specifies that the first mobile terminal "detect[s] a virus infection [...] to inactivate viruses [...]". The board takes the view that the skilled person would read the phrase "to inactivate viruses [...]" as "in order to inactivate viruses [...]" and, hence, the corresponding phrase as a statement of purpose.

3.3 According to step f) of claim 1, a "suitable" vaccine program is requested "when the virus vaccine program previously stored [...] can not inactivate the virus". This language leaves open whether the suitable program is requested when the stored vaccine program is known or assumed to be unsuitable to inactivate the virus or only after an attempt to inactivate it has failed.

3.4 In step f) of claim 1, the phrase "program suitable for the detected virus to thereby inactivate the virus by using the received virus vaccine program" is grammatically unclear. The board takes the view that the skilled reader of claim 1 would construe that phrase to mean "program suitable for inactivating the detected virus".

Inventive step

4. The subject-matter of claim 1 of both requests consists of two parts which appear to be only loosely connected with each other.

4.1 Steps a)-c) specify a central "virus monitoring unit" for detecting a virus infection in data in transit between two mobile devices, for example in email messa-
ges, to eliminate the detected virus and to forward the resulting "cured" data.

4.2 Steps e) and f), with the exception of the "in response" phrase of step e), specify that the mobile unit determines whether a local vaccine program "can" inactivate a virus and, if not, requests from the virus monitoring unit a vaccine program which can.

4.3 Step d) specifies that the virus monitoring unit notifies the mobile terminal about the detected virus infection and step e) specifies that the mobile terminal acts "in response" to this notification.

5. Both parts are connected with each other in that the first "triggers" the second and in that the "suitable" vaccine program is requested from the same unit having detected the virus infection in the transmitted data.

5.1 The board considers that what happens at the mobile device is essentially independent of what happened previously at the virus monitoring unit.

5.2 The appellant claims the following synergistic effect of the two parts (see e.g. grounds of appeal, page 15, point 9): because the mobile terminal requests a suitable vaccine program from the virus monitoring unit, which has just "cured" the transmitted data from that virus, the requested vaccine program must already be available at the virus monitoring unit (see grounds of appeal, points 8-10, resp. last sentences).

5.3 The board is not convinced by this argument, considering that, on the assumption that the data base available to the VMU is up-to-date and complete, the availability of
the required vaccine program does not depend on whether
the VMU has just deleted a virus from data in transit.

The prior art

6. In the decision under appeal, the assessment of inven-
tive step started from D1. The board agrees that this is
a suitable choice but prefers an assessment starting
from D4 or D5.

7. D4 and D5 disclose virus checking of emails in transi-
tion at a gateway server (D4, see e.g. abstract, 3rd
para.) or "gateway node" (D5, col. 5, lines 18-24). Both
disclose that the sender of an email in which a virus
was found is informed accordingly (D4, p. 5, penult.
para.; D5, col. 20, lines 41-63).

Main request

8. In the board's view, each of D4 and D5 discloses the
preamble of claim 1 and steps a) - d).

8.1 Thus the differences are steps e) and f), i.e. the steps
taken by the sender of the infected data. The board
finds these differences to solve the problem of
determining and deleting the cause of the virus infec-
tion of the transmitted data.

8.2 The board considers that this problem is one the skilled
person, given either of D4 and D5, can reasonably be ex-
pected to address. It would be an obvious reaction for a
sender, to the notification that a virus infection was
found in a sent email, to determine whether this
infection originated in the sending computer and, if so,
to try to delete the virus.
8.3 It has been a matter of convention for years, dating back well before the priority date in the present case, that client computers are equipped with some sort of antivirus software. Hence doing this for the sender computers of D4 and D5 does not require an inventive step. The board notes that this also applies to mobile devices, in particular in view of the fact that many conventional computers are "mobile".

8.4 Furthermore, if antivirus software is available on the mobile device, the board considers it obvious that the "mobile terminal" will either run this program or, at least, consider whether it should be run. Typical antivirus software must be regularly updated to remain effective against new viruses. It would thus be obvious for the mobile terminal to determine whether the locally available vaccine program is up-to-date and, if not, consider it "unsuitable" and download an up-to-date version.

8.5 Whether this up-to-date version is requested from the VMU or some other server is, in the board's judgment, a marginal and obvious choice.

8.6 Starting from D4 or D5, therefore, the board finds the subject-matter of claim 1 of the main request to be obvious in view of common general knowledge of antivirus software, Article 56 EPC 1973.

Auxiliary request

9. Claim 1 of the auxiliary request specifies that the request for a "suitable" vaccine program includes "vaccine program information, virus information and capability information of the first mobile terminal".
9.1 The board notes that claim 1 does not specify how the "virus monitoring unit" uses these pieces of information. Thus it is questionable whether their inclusion in the claim has, per se, any technical effect and thus whether they can contribute to inventive step of the claimed subject-matter at all.

9.2 The description discloses (p. 8, lines 14-19) that the "vaccine request message" comprises "version information", including the virus identity, and a "capability field", including "operating system (OS) information" of the mobile terminal.

9.3 In the scenario considered above, the board considers it obvious that the mobile terminal requests an update indicating the version numbers (a) of the locally available "vaccine program" - so that the server can determine whether an update is needed - and (b) of the local operating system - so that the server can provide the update for the pertinent operating system. The board also considers it to be an obvious option for the mobile terminal to indicate which virus it is specifically interested in - for instance to save bandwidth if the local antivirus software is up-to-date with respect to the virus of interest.

9.4 Therefore, the board also concludes that claim 1 of the auxiliary request lacks inventive step over D4 or D5 in view of common general knowledge of antivirus software, Article 56 EPC 1973.

Summary

10. In view of this finding it is immaterial that, as explained in the summons, the board comes to the same conclusion starting from document D1.
11. There not being an allowable request, the appeal must be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

L. Malécot-Grob W. Sekretaruk

Decision electronically authenticated