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**Datasheet for the decision  
of 3 July 2014**

**Case Number:** T 0506/10 - 3.5.01

**Application Number:** 01914786.7

**Publication Number:** 1266286

**IPC:** G06F11/00, G06F1/00

**Language of the proceedings:** EN

**Title of invention:**  
METHOD AND SYSTEM FOR DETECTING VIRUSES ON HANDHELD COMPUTERS

**Applicant:**  
McAfee, Inc.

**Headword:**  
Virus Scanning / McAFEE

**Relevant legal provisions:**  
EPC 1973 Art. 56

**Keyword:**  
Inventive step - (no)



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Case Number: T 0506/10 - 3.5.01

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.01**  
**of 3 July 2014**

**Appellant:** McAfee, Inc.  
(Applicant) 3965 Freedom Circle  
Santa Clara, CA 95054 (US)

**Representative:** Goddar, Heinz J.  
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**Decision under appeal:** **Decision of the Examining Division of the European Patent Office posted on 17 December 2009 refusing European patent application No. 01914786.7 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chairman** S. Wibergh  
**Members:** P. Scriven  
S. Fernández de Córdoba

## Summary of Facts and Submissions

- I. This appeal is against the Examining Division's decision to refuse European patent application 01914786.7.
- II. The following documents are relevant to this decision:
  - D1: GB-A-2 283 341
  - D2: US-A-6 006 274
  - D4: C.B. Welch, "ManageWise 2.6 - InocuLAN 4 for Windows NT Guide".
- III. The Examining Division refused the then pending main request on the grounds of a lack of inventive step in the light of D4.
- IV. With the statement setting out the grounds of appeal, the appellant submitted a set of claims identical to the main request before the Examining Division.
- V. The Board arranged oral proceedings, invited the appellant to attend, and sent a communication setting out its provisional view of the case. A summary is set out in point XI., below.
- VI. The appellant submitted a new set of claims as an auxiliary request and arguments in its favour. The arguments are summarised in point XII., below.
- VII. The appellant later informed the Board that it would not be represented at oral proceedings. The Board consequently held oral proceedings, and announced its decision, in the absence of the appellant.

VIII. The appellant's requests were that the Examining Division's decision be set aside and that a patent be granted on the basis of the main request, submitted with the statement setting out the grounds of appeal, or else of the auxiliary request, submitted in response to the summons to oral proceedings.

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

*A method for detecting viruses on a handheld computer comprising:  
scanning (188) data from a handheld computer for viruses with a virus detection program;  
characterised by the following steps taking place before scanning:  
putting said handheld computer into communication with a computer system,  
reading (182) data from the handheld computer (20);  
storing (184) said data at least temporarily on the computer system (22);  
and characterised in that said scanning (188) of said data for viruses with the virus detection program takes place on said computer system;  
and further characterised by updating data held on the handheld computer, after said scanning, wherein said updating is based on the results of the scanning by writing (198) cleaned data to the handheld computer and deleting (202) infected data.*

X. Claim 1 according to the auxiliary request reads as follows:

*A method for detecting viruses on a handheld computer, the method comprising:  
creating (150) a communication link between the handheld computer and a computer system having a virus detection program;  
copying (182) data from the handheld computer to the computer system;  
scanning (188) the data for viruses with the virus detection program while the handheld computer is in communication with the computer system;  
initiating a synchronization operation between the handheld computer and the computer system, characterized in that the scanning (188) of the data occurs during the synchronization operation.*

XI. In the communication accompanying the summons to oral proceedings, the Board made the following observations:

The prior art as set out in the application as filed might be a reasonable starting point for consideration of inventive step, but both D1 and D4 seemed relevant. In particular, D1 dealt with the situation in which one computer might have insufficient resources for virus scanning.

The skilled person's general knowledge would have encompassed: scanning for viruses by a hand-held computer; the connection of a hand-held computer to a PC, and the sharing of data between the two; the remedy of replacing infected data by clean data; and the possibility of running processes for which one machine has insufficient resources on a different machine.

XII. The appellant's arguments can be summarized as follows:

The Examining Division had not explained why document D4 was regarded as the closest prior art. According to the problem-solution approach, the closest prior art should be directed to a purpose or effect similar to that of the invention. D4 was not directed to hand-held devices and so was not relevant, hand-held virus detection being fundamentally different from detection on a standard computer. The closest prior art should be the prior art set out in the application. From that starting point, the features of reading and storing data, scanning on the computer system, and writing clean data were all novel.

Document D2 was concerned with synchronisation and involved the connection of a hand-held device to a computer, but it was not for the purpose of virus scanning, and there was no suggestion of using the computer system to compensate for the relative lack of processing power in the hand-held device.

Claim 1 according to the auxiliary request was the same as original claim 25. Since its subject matter was similar to that of claim 1 according to the main request, either D1 or D4 could be considered as closest prior art. Scanning during a synchronisation operation was disclosed in neither D1 nor D4. This feature made the scanning faster and more efficient, because it used the communication link already provided for synchronisation.

## **Reasons for the Decision**

### *Introduction*

1. The invention is concerned with virus scanning. That was, at the priority date, the most widely used type of antivirus measure (published application, page 4, lines 14 - 15). A virus scanner worked by examining files on a computer, and looking for particular patterns of data that were known to be associated with viruses. One of the measures that was commonly taken, if such a pattern was found, was to "clean" the data (published application, page 5, lines 2 - 4).
2. The invention is not about how viruses come to be associated with particular patterns of data, or how the patterns can be efficiently recognised. It deals with a different problem. Hand-held computers were becoming prevalent, and were vulnerable to viruses just as any other computer was. Virus scanning did not work very well on them. They had too little memory and were too slow. That is the problem behind the present invention.
3. The idea of the invention can be simply stated: have another, more powerful computer do what the hand-held computer cannot. Data are copied from the hand-held computer to another computer, and the other computer performs the scan.
4. In the invention as defined by claim 1 according to the main request, infected data are erased and clean data are written to the hand-held device.
5. In the invention defined by claim 1 according to the auxiliary request, no action is defined as taking place after the scan, but the scan itself takes place during

a "synchronization operation."

*The main request, inventive step*

6. The appellant suggests that the prior art set out in the application should be the starting point for the assessment of inventive step, but, in its arguments in support of the auxiliary request, accepts that D1 or D4 could be taken (see point XII., above). The Board's view is that the invention defined by claim 1 would have been obvious to the skilled person whether she started from D1 or from the prior art as set out in the application. Both are reasonable starting points.
7. D1 discloses a network of workstations and a server. The workstations have limited capacity, and so virus scanning is carried out by the server (D1, page 1, line 27 - page 2, line 1; page 2, lines 10 - 16 and 18 - 22). That involves copying the data to the server. When a virus is found, there is no cleaning; rather, access to the data is blocked (D1, page 4, lines 8 - 11; page 8, line 7).
8. As a result, D1 discloses the whole subject matter of claim 1 except that the workstations of D1 are not hand-held, and that D1 imposes a sort of quarantine on files rather than cleaning them.
9. The appellant has not suggested that there is any unexpected advantage in cleaning data on hand-held computers; nor does the Board see any.
10. The Board considers that the skilled person would have been motivated to use at least one hand-held device. If such devices were not common in 1995, when D1 was



written, they were by the priority date (24 March 2000) of the present application. The skilled person would have been aware of general developments in computers, in particular the fact that many manufacturers were producing hand-held devices. The published application mentions several, on page 6. In such an environment, it would have been natural for her to consider their use.

11. The Board put the view that cleaning was well known to the appellant, who did not argue against it. Indeed, the application itself states that cleaning was included in "most scanners" (published application, page 5, lines 2 - 4). Such cleaning would, in the Board's judgment, have been an obvious alternative to the quarantine proposed in D1.
12. Thus, the invention would have been obvious for the skilled person starting from D1.
13. A skilled person starting from the prior art set out in the application would have had a hand-held computer, which was not powerful enough for effective virus scanning. She would have been aware that what one computer cannot do easily, can be done by a more powerful machine. That was part of her general knowledge, but also clearly emerges from D1. This was put to the appellant, who made no argument against it; see point XI., above. The Board, therefore, considers that the skilled person would have sought to apply this concept.
14. Once the skilled person has decided to use a more powerful computer to do the scanning, the connection to a computer system, the reading and storage of data, and the scanning of the data by the computer system follow inevitably. What does not follow inevitably is the

cleaning of data. There are other options, such as quarantine as in D1. However, the arguments already given (point 11.) apply equally here: it would have been obvious to provide for what was one of the most common remedies.

15. Thus, the invention would have been obvious for the skilled person starting from the prior art set out in the application.
16. The Board's judgment, therefore, is that the main request cannot be allowed for lack of inventive step (Article 56 EPC 1973).

*The auxiliary request*

17. This request was submitted after oral proceedings had been arranged. Under Article 13 RPBA, the Board should not admit it, if doing so would entail adjournment of the oral proceedings. That means that the Board should be able to deal with any issues that arise at the oral proceedings already scheduled. If the appellant chooses not to attend, the Board should still be able to deal with all issues (Article 15(3) RPBA).
18. This request raises an issue as to what counts as a "synchronisation operation". In the Board's view, the appellant must expect the Board to deal with the interpretation of this term. It is the basis of the appellant's arguments in favour of inventive step. Apart from that, the subject matter of claim 1 does not raise any issues that were not already under consideration in the main request. Thus, the Board considers that the request can be admitted.

19. The method defined by claim 1 does not apply any remedy when a virus is found. It ends with the scanning itself. However, unlike in the main request, the scanning is carried out during a synchronisation operation. It is the Board's view that this term encompasses the replacing of a file on the hand-held device with a corresponding file, possibly a more up-to-date version, from the computer system. But that is just what the steps of erasing infected data and writing clean data achieve. The infected data are replaced by clean data. It follows, therefore, from the decision on the main request, that the auxiliary request does not involve an inventive step (Article 56 EPC 1973).
  
20. The Board recognises that a skilled reader, facing the term "synchronisation", in the sense of making the data on the hand-held computer correspond to the data on the computer system, would tend not to think of cleaning data of viruses, but the Board is satisfied that the term is broad enough to cover it.
  
21. The Board also notes that any user of, say, a personal digital assistant might be annoyed by having to connect it to his computer in order to synchronise the diary, and then connect again to scan for viruses. It is a small step from this annoyance to performing them with only one connection, which is what the method of claim 1 does. Thus, there is also a lack of inventive step from this point of view.
  
22. The Board concludes that the auxiliary request cannot be allowed.

**Order**

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

The appeal is dismissed.

The Registrar:

The Chairman:



T. Buschek

S. Wibergh

Decision electronically authenticated