Datasheet for the decision
of 17 January 2014

Case Number: T 0911/10 - 3.5.06
Application Number: 05794690.7
Publication Number: 1810113
IPC: G06F1/00
Language of the proceedings: EN
Title of invention: SOURCE CODE PROTECTION

Applicant:
MStar Semiconductor, Inc.
MStar Software R&D (Shenzhen) Ltd.
MStar France SAS
MStar Semiconductor, Inc.

Headword:
Source code protection/MSTAR

Relevant legal provisions:
RPBA Art. 5(3), 13(1), 15(3)

Keyword:
Oral proceedings - held in absence of appellant
Late-filed amended main and auxiliary requests - not clearly allowable - admitted (no)

Decisions cited:
T 0263/07
Catchword:
Case Number: T 0911/10 - 3.5.06

DECISION
of Technical Board of Appeal 3.5.06
of 17 January 2014

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Decision under appeal: Decision of the Examining Division of the European Patent Office posted on 16 November 2009 refusing European patent application No. 05794690.7 pursuant to Article 97(2) EPC.
Composition of the Board:

Chairman: D. Rees
Members: M. Müller
         M.B Tardo-Dino
Summary of Facts and Submissions

I. The appeal lies against the decision of the examining division to refuse the European patent application no. 05794690.7 based on Article 113 (2) EPC after not admitting the sole request pursuant to Rule 137 (4) EPC pre-2010. In a section entitled "Auxiliary observations" the examining division also raised objections against that request under Articles 83, 84 EPC 1973 and 123 (2) EPC.

II. A notice of appeal was filed on 14 January 2010, the appeal fee being paid on the same day. A statement of grounds of appeal was received on 16 March 2010. The appellant requested that the decision under appeal be set aside and that a patent be granted based on one of three sets of claims according to a main or two auxiliary requests as filed with the grounds of appeal.

III. With a summons to oral proceedings, the board informed the appellant about its preliminary opinion, raising objections under Article 56 and 84 EPC 1973.

IV. In response to the summons, with letter dated 13 November 2013, the appellant withdrew the second auxiliary request, filed amended claims 1-15 and 1-11 according to a main or first auxiliary request, respectively, and requested grant of a patent on this basis. The other application documents are as follows:

   description, pages
   1-3 in respective versions for the main or first auxiliary request as filed on 13 November 2013
   4-6 as filed with entry into the regional phase before the EPO
drawings, sheets
1/8-8/8 as published

V. The independent claims 1 and 12 according to the main request read as follows.

"A method of protecting an original plain text file which comprises the steps of:
a) encrypting the original file and making it available to a user as a protected file (101);
b) issuing to said user a user program and a user license (103), wherein the user program is configured to decrypt the protected file and to generate an image of the original file, the user program comprising an editor program that allows the user to edit the image of the original file, the method being characterised in that it further comprises a step of saving changes made to the image of the original file in an encrypted form, separate from the original file, whilst preventing the image of the original plain text file from being copied to any file, other than as a further protected file, by storing the image of the original plain text file in memory of a computer, which memory is not backed up to a swap file of the computer."

"12. A computer program for a user to access an original plain text file which has been protected by being encrypted in a protected file (101), the program being adapted to decrypt the protected file once authorised by a user license (103) issued by an authority responsible for the protected file so as to generate an image of the original plain text file, the computer program further comprising an editor program that allows the user to edit the image of the original file, characterised in that the computer program is configured to save the changes made to the image of the
original file in an encrypted form, separate from the original file, whilst preventing the image of the original plain text file from being copied to any file, other than as a further protected file, by storing the image of the original plain text file in memory of a computer, which memory is not backed up to a swap file of the computer."

Independent claims 1 and 10 according to the first auxiliary request differ from claims 1 and 12 of the main request in that initial occurrence of the term "original plain text file" is replaced by "original plain text computer source code file" and in that, at the end, the following phrases are respectively added.

"1. ..., and in that the method further comprises generating from the image of the original file an obfuscated output computer source code file, in which human-meaningful variable names are replaced with randomly selected names in the obfuscated output computer source code file."

"10. ..., and in that the computer program further comprises an obfuscator (302) that generates from the image of the original file an obfuscated output file, in which human-meaningful variable names are replaced with randomly selected names in the obfuscated output computer source code file."

VI. In a separate letter, the appellant's representative informed the board that it was instructed not to attend the scheduled oral proceedings but asked to be contacted by the board should only minor deficiencies withstand the grant of a European patent.
VII. Oral proceedings were held as scheduled and, as announced, in the absence of anyone for the appellant. At the end of the oral proceedings, the chairman announced the decision of the board.

Reasons for the Decision

1. According to Article 15(3) of the Rules of Procedure of the Boards of Appeal (RPBA) 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. In the present case, the board was in a position to take a decision at the end of the hearing. With the summons the board had been informed the appellant that amendments would be examined as to their admissibility and their compliance with the EPC even in the appellant's absence. The board also notes that the decision under appeal contained, if only in a section entitled "Auxiliary observations", a number of objections (under Articles 83, 84 EPC 1973 and 123 (2) EPC) against the claims corresponding to the now pending claims. The appellant should therefore have been aware that the amended claims even if admissible might be deficient in other ways.

2. In its letter of 20 December 2013 the appellant's representative asked to be contacted by a member of the technical board of appeal to permit minor deficiencies to be remedied. No legal provision governing the appeal proceedings foresees such a possibility. The rapporteur acts on behalf of the board when addressing the party (Article 5(3) RPBA). Apart from the fact that a telephone conversation does not conform to the principle of collective decision making, it may be a source of new
issues or commit the board without preliminary dis-
cussion (see T 263/07, reasons 2). By contrast, the
oral proceedings offer the appellant sufficient oppor-
tunity to remedy any outstanding deficiencies. If the
appellant chooses not to be present, it cannot expect
the board to take a requested alternative course of
action not provided for by the rules of procedure. The
board therefore refuses the appellant's request for a
telephone conversation.

3. The main and auxiliary requests subject to the appeal
were filed on 13 November 2013 after the board's commu-
nication. According to Rule 13(1) RPBA they constitute
an amendment to the party's case which the board has
discretion not to admit in view of inter alia the
current state of the proceedings and the need for pro-
cedural economy. In this regard it is an established
criterion in the jurisprudence of the boards of appeal
to assess whether late filed claims are clearly allow-
able. In the following, the board will assess the new
claims accordingly.

4. The application generally relates to the protection of
a plain text file, especially containing computer pro-
gram source code, against illegal copying and sharing
once it has been distributed to an authorised user (see
original description, p. 1, 4th par.). The central idea
of the invention is to distribute the file in encrypted
form - as a "protected file" - along with a "user li-
cence" and a "user program", especially an editor. The
user program determines with the license whether "it is
entitled to run" and, if it is, decrypts the file, also
aided by the license, and offers it to the user to edit
(p. 4, 3rd par. - p. 5, 1st par.; figs. 1 and 2). The
edited file is stored in terms of the differences com-
pared with the original file. These differences are
also stored in encrypted form (par. bridging pp. 4-5; p. 5, 2nd par.). Furthermore, the application foresees that the invention prevents the "image of the original file" - i.e. the original file in decrypted form - from being copied to any file, other than as a further protected file (see e.g. p. 1, penult. par.).

5. In the annex to the summons (points 6.2 and 6.3) the board had expressed the view that the problem addressed by the invention is not achieved if it is merely possible to save the original and the difference files in encrypted (or obfuscated) form but only if such storage is enforced, i.e. if it is made impossible that the original file or the changes are stored in plain text form. At a minimum this implied that it is a necessary feature of the "computer tool" that it does not offer the user the function of storing the protected text file unencrypted. The board observed that the then pending claims did not contain this limitation which appeared to constitute a lack of essential features and a deficiency under Article 84 EPC 1973. The board further pointed out that the description specified the goal of "preventing the image of the original file from being copied to any file other than as a further protected file" only in broad terms without also disclosing how this goal was actually achieved (see p. 1, penult. par.; p. 2, 4th par.) and expressed its doubt as to whether the description provided adequate basis to incorporate the missing feature in a sufficiently clear manner.

6. In response to this objection, the appellant amended the independent claims of both requests by adding the phrase "whilst preventing the image of the original plain text file from being copied to any file, other than as a further protected file, by storing the image
of the original plain text file in memory of a computer, which memory is not backed up to a swap file of the computer" (henceforth "the additional feature").

6.1 For original disclosure, the appellant referred to the description on page 1, last paragraph, which discloses that the "image is preferably protected against copying by arranging that the memory in which it is stored is not backed up to the computer memory swap file so that it cannot be found by programs that might read the image file", and on page 4, penultimate paragraph, which refers to a "human readable image" which "is held in the memory of a computer which is not backed up to the computer swap file so that the image cannot be found by other programs on the computer".

6.2 The additional feature corresponds substantially to the one which had caused the problem under Rule 137 (4) EPC pre-2010 because, according to the decision under appeal, it was neither searched nor unitary with the original set of claims. The appellant addressed this fact by arguing, in its response of 13 November 2013, that even if the additional feature had not been searched, it was unitary with the original claims so that Rule 137 (5) EPC - equivalent to Rule 137 (4) EPC pre-2010 - did not apply.

7. The board notes that the claims do not specify any further detail regarding the memory structure and memory management of the computer system on which the invention is meant to be implemented, nor is such detail disclosed in the original application.

7.1 Firstly, it appears that the claims do not require the computer system to have any swap file at all, as they only require that the image "is not backed up to a swap
file of the computer" (emphasis added). In a computer without any swap file this feature would be trivially satisfied without requiring any explicit method step or any modification of the user program.

7.2 Secondly, problems remain even on the assumption that the computer has a swap file. Typically, a computer swap file is a means for the operating system to simulate extra memory by moving currently unused data from the RAM to a hard disk. The swap file being under the control of operating system, application programs (such as the claimed editor program) are typically not - and need not be - aware of the fact that swap memory is being used. The claims further specify the existence of some memory which is not backed up, despite the existence of a swap file. Again, it is normally a function of the operating system to allocate memory for an application program to use, and the application program has no control over this choice. The description however does not disclose how the claimed result is achieved that the pertinent memory is not backed up. Arguably, therefore, the description does not sufficiently disclose the additional feature as required by Article 83 EPC 1973. Moreover, it is doubtful whether the means employed to achieve this result is a feature of the application program, of the operating system or, possibly of both. Accordingly it is unclear whether and to what extent the additional feature constitutes a limitation of the independent computer program claims, i.e. of claim 12 of the main and claim 10 of the auxiliary request, Article 84 EPC 1973.

7.3 Thirdly, it remains questionable whether the intended effect of protecting the original plain text is achieved by the subject matter of the independent claims even though they comprise the additional
feature, as long as they do not also specify expressly that the computer program prohibits the user from simply storing a plain text file in unencrypted form, Article 84 EPC 1973.

8. In view of the above the board comes to the conclusion that the independent claims of the amended claims are not clearly allowable at least under Articles 83 and 84 EPC 1973. Thus the board exercises its discretion under Rule 13(1) RPBA and does not admit the new requests into the procedure.

9. There being no admitted request, the appeal as a whole has to be dismissed.

**Order**

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

The appeal is dismissed.

The Registrar: 

The Chairman:

B. Atienza Vivancos 

D. Rees

Decision electronically authenticated