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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:

Beschwerdekammern
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Case Number: **T 0911/10 - 3.5.06**

D E C I S I O N
of Technical Board of Appeal 3.5.06
of 17 January 2014

Appellant: (Applicant 1)	MStar Semiconductor, Inc. 2nd Floor, Compass Centre P.O. Box 10338 Shedden Road Grand Cayman KY1-1003 (KY)
Appellant: (Applicant 2)	MStar Software R&D (Shenzhen) Ltd. 4F, Block C Shenzhen Tech-Innovation International Bldg. 10th Road of Keji, South Area High-Tech Industrial Park Shenzhen P.C. 51805 (CN)
Appellant: (Applicant 3)	MStar France SAS 13 Rue Camille Desmoulins 92441 Issy Les Moulineaux (FR)
Appellant: (Applicant 4)	MStar Semiconductor, Inc. 4F-1, No. 26, Tai- Yuan Street Chupei Hsinchu Hsien Taiwan 302 (TW)
Representative:	Howell, Matthew Dafydd Withers & Rogers LLP 4 More London Riverside London SE1 2AU (GB)
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 observa-
        tions" 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 auxil-
        iary 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 Novem-
        ber 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 contac-
      ted by the board should only minor deficiencies with-
      stand 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 deci-
        sion, by reason only of the absence at the oral procee-
        dings of any party duly summoned who may then be trea-
        ted 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 tele-
        phone 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 sto-
        rage 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 ne-
        cessary 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 fur-
        ther 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 pro-
        tected file" only in broad terms without also disclo-
        sing 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 compu-
ter, 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 simu-
        late 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 be-
        ing used. The claims further specify the existence of
        some memory which is not backed up, despite the exis-
        tence 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 suffi-
        ciently 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 auxil-
        iary 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