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**Datasheet for the decision
of 4 August 2015**

Case Number: T 1461/12 - 3.5.06

Application Number: 08771408.5

Publication Number: 2174257

IPC: G06F21/22

Language of the proceedings: EN

Title of invention:

SYSTEM AND METHOD FOR AUDITING SOFTWARE USAGE

Applicant:

Uniloc Corporation

Headword:

Two unlock keys/UNILOC

Relevant legal provisions:

EPC 1973 Art. 56, 84
EPC Art. 52, 112(1), 123(2)
RPBA Art. 20(1)

Keyword:

Accelerated processing - (no)
Interview with the rapporteur - (no)
Assessment of inventive step of mixed inventions
Inventive step - (no)
Referral to the Enlarged Board of Appeal - (no)

Decisions cited:

G 0003/98, G 0003/08, T 0038/86, T 0931/95, T 1173/97,
T 0641/00, T 0928/03, T 0154/04, T 1784/06, T 1051/07,
T 0012/08, T 0905/09, T 0632/10, T 1769/10

Catchword:

See points 14-17.



**Beschwerdekammern
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Case Number: T 1461/12 - 3.5.06

**D E C I S I O N
of Technical Board of Appeal 3.5.06
of 4 August 2015**

Appellant: Uniloc Corporation
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Representative: Browne, Robin Forsythe
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Decision under appeal: **Decision of the Examining Division of the European Patent Office posted on 6 February 2012 refusing European patent application No. 08771408.5 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 dated 6 February 2012, to refuse European Patent application No. 08771408.5 for lack of inventive step over the document

D1: US 5 745 879 A.

II. A notice of appeal was filed on 4 April 2012, the appeal fee being paid on the same day. A statement of grounds of appeal was received on 18 June 2012. The appellant requested that the decision under appeal be set aside and that a patent be granted based on amended claims according to a main request or one of three auxiliary requests as filed with the grounds of appeal and a description which remained to be adapted.

III. The appellant claimed that the examining division had reached its decision by applying the "out-dated and inappropriate contribution approach", was mixing up "the statutory exclusions of Art.52(2) EPC with the requirements of and tests applied in relation to Art.56 EPC", and missed "the point at which the threshold for patentability of computer-implemented inventions is passed", and argued that the confusion was caused by a "lack of clear guidance in the current decisions of the Board of Appeal" (see grounds of appeal, points 2.8-2.10). The appellant criticized the approach based on T 641/00 as incorrect, inconsistent, unworkable and ineffective (see grounds of appeal, point 6.20). It claimed that the Enlarged Board of Appeal itself in G 3/08 (section 10.13.2) had questioned the correctness of the approach based on T 641/00 and summarized in T 154/04 (see grounds of appeal, point 6.5) and that this approach, in G 3/08 referred to as an "elaborate system", should

be reviewed and changed (see grounds of appeal, point 6.9). It criticized the fact that the notion of "technical" was undefined and hence open to subjective and arbitrary assessment, and that the Enlarged Board of Appeal, by failing to define what it considered to be technical had "propagated uncertainty" in this respect (reference was made to G 3/08, section 9.2). Moreover, the appellant argued that two decisions issued after G 3/08, namely T 1051/07 and T 1769/10, and in particular point 4.2 of the reasons of the latter, represented a "new approach" which was in conflict with the approach based on T 641/00 (see grounds of appeal, points 6.12-6.23 and 6.26).

IV. The appellant also submitted a number of what it called "Threshold Questions" Q1-Q16 relating to the assessment of the inventive step of mixed inventions - *i.e.* inventions containing both "technical" and "non-technical" features - and requested that the board address the issues raised in these questions or otherwise refer them to the Enlarged Board of Appeal, in the form set out in grounds of appeal or suitably modified in order to improve clarity or to ensure a definite response. The questions Q1-Q16 read as follows (emphases by the appellant):

- Q1. In the context of computer-implemented inventions, in determining whether the totality of a claim is acceptable under Articles 54 and 56 EPC, is it not first necessary to:
- i) identify *what* the claimed subject-matter purports to achieve rather than *how* something is achieved;
 - ii) to ask whether the '*what is achieved*' brings about a *practical technical advantage* in the real world in the sense that the skilled person is able

unambiguously to derive the merest scintilla of an advantage that causes *in practical reality* the technical implementation of the claimed arrangement to operate in a better, faster, more secure or more reliable fashion;

iii) to check that the *advantage* does not seek to dictate or look to control inevitable human behaviour and, in the affirmative, to reject the claim;

iv) to confirm that the subject-matter of the claim:

a) is not merely the automation of an existing process, such as a mental act or a method, scheme or rule for playing a game or doing business; and

b) produces a technical effect in the real world irrespective of the nature of the data/content being processed or the application being run by the computer; and only then

v) to ask whether the features of the claim in totality are inventive over the prior art?

vi) If not, then what is the test and do any of points (i) to (v) have independent validity in such a test?

Q2. At what point does a commercial advantage take on a technical nature that in a corresponding claim element provides a technical contribution and/or further technical effect?

Q3. In following **T1769/10**, if "the objective technical problem to be solved may be formulated more specifically as *how to implement technically the aim in the non-technical field*, or, reworded, *to provide a technical solution involving technical means how to achieve the aim in the non-technical*

field", does this mean that a technical contribution (and more particularly an inventive step) arises when a *machine* is configured to operate in a different way or to effect any *transformation* of something, for example data, into something else, e.g. higher resolution data that can be applied to enhance a real world effect, as in the processing applied within *T208/84 Vicom*? If not, then what is the approach to assessing inventive step and/or the exclusion of features from consideration?

- Q4. Is the issue of "*technical contribution*" or "*technical effect*" the point where the skilled person is able unambiguously to derive the merest scintilla of an advantage that causes *in practical reality* the technical implementation of the claimed arrangement to operate in a better, faster, more secure and/or more reliable fashion? How does this differ, if at all, from requiring a further technical effect in *T1173/97-IBM Computer Program Product*?
- Q5. Is it that a CII that automates a business process or a mental act not in fact looking to claim control of human behaviour and that, actually, *any* claim that dictates or controls *inevitable* human behaviour (through a claimed process or architecture) encompasses or defines "as such" excluded subject-matter? Is there a relationship between non-patentable subject-matter and "human behavioural control" and, if so, what is it?
- Q6. Is it that a claim that seeks to protect a program for a computer or a scheme, rule or method of playing a game "as such" not actually lacking a practical application in the real world that

would, if present, otherwise give rise to a tangible technical contribution, i.e. a computer program "as such" has no patentable merit because it only goes through a number of fixed steps to process content without making any use/application of the result in a practical and technical way?

- Q7. Does a claim directed towards the implementation of an idea or function that brings about a surprising effect/advantage *in practical reality* that is a further effect in the real world always support patentable subject-matter, provided (of course) that the overall contribution (e.g. feature interaction) of a claim is non-obvious over the prior art? If not, why not?
- Q8. If claimed CII-based subject-matter provides a choice to an individual, does such a claim not seek only to *influence* an effect in the real world having regard to external considerations and in the sense that *influence* is not equivalent to inevitable, unvarying *control* in which there is simply no choice and thus to be potentially patentable? If not, then why not?
- Q9. Does the approach in Q1 not precede the formulation of a technical problem as an aim to be achieved in a non-technical field, as recommended in the approach in T0154/04-Duns Licensing? If not why not?
- Q10. Does the approach in Q3 not render the question of "how" something is achieved initially irrelevant with respect to the objective assessment of inventive step? If not, why not?

- Q11. Given that a commercial effect (such as maintenance of confidentiality or the process by which a random result for a game may be generated, such as in **T0012/08-3.2.4**) can have an underlying advantage that may not align with an easily identifiable technical problem (even if framed as an object to be achieved in a non-technical field), is such an underlying advantage sufficient for a claim that embodies an arrangement that produces that underlying advantage to be considered patentable, but at least worthy of consideration under the provisions of Art.54 EPC and Art.56 EPC? If not, then why not? In what circumstances could such a commercial effect support an allowable claim?
- Q12. Is it that a claim that seeks to protect a program for a computer or a scheme, rule or method of playing a game "as such" not actually lacking a practical application in the real world that would, if present, otherwise give rise to a tangible technical contribution, i.e. a computer program "as such" has no patentable merit because it only goes through a number of fixed steps to process content without making any use/application of the result in a practical and technical way?
- Q13. Does a claim directed towards the implementation of an idea or function that brings about a surprising effect/advantage in practical reality [i.e. a further effect] in the real world always support patentable subject-matter, provided (of course) that the overall contribution (e.g. feature interaction) of a claim is non-obvious over the prior art? If not, why not?

- Q14. If claimed CII-based subject-matter provides a choice to an individual, does such a claim not seek only to influence an effect in the real world having regard to external considerations [and in the sense that influence is not equivalent to inevitable, unvarying control in which there is simply no choice] and thus to be potentially patentable? If not, then why not?
- Q15. If none of the above is relevant, how should those elements of a claim that relate to excluded subject-matter be treated when assessing whether an invention is novel and inventive?
- Q16. How is it to be determined whether a feature in a claim is "technical" or "non-technical"?
- V. The appellant further requested oral proceedings and also an interview with the rapporteur with a view to avoiding oral proceedings. Moreover, it requested that the "appeal be treated on an expedited basis" because it "raise[d] fundamental issues in the examination of the Appellant's proprietary rights by the first instance of the EPO" and because it was "of commercial importance to the Appellant".
- VI. The board summoned the appellant to oral proceedings, thereby refusing the appellant's request for an interview with the rapporteur, and explained why it had not granted the appellant's request for expedited processing. In the annex to the summons, the board also informed the appellant of its preliminary opinion. It expressed its tendency not to admit the main and 1st and 2nd auxiliary requests pursuant to Article 12(4) RPBA. In substance, the board raised a number of clarity objections, Article 84 EPC 1973, explained that

it was minded to follow the established jurisprudence regarding the assessment of "mixed inventions" based on T 641/00 COMVIK and, on that premise, tended to find claim of the 3rd auxiliary request to lack an inventive step over D1, Article 56 EPC 1973.

VII. In response to the summons, in a letter dated 3 July 2015, the appellant withdrew the main request and 1st and 2nd auxiliary requests, making the 3rd auxiliary request its main request and filed new claims according to an auxiliary request.

VIII. Oral proceedings were held on 4 August 2015, during which the appellant replaced the main request with an amended set of claims 1-6 (marked "12.00 pm") and requested grant of a patent based on these claims or, subsidiarily, based on only the system claims 5 and 6. The auxiliary request was withdrawn.

IX. Claim 1 reads as follows:

"A method for auditing software usage, comprising:
at an authorization authority responsible for verifying software licenses:

receiving both a serial number for software installed on a computing device and a unique device identifier for the device (61);

determining whether the received serial number corresponds to one of recognized serial numbers;

in response to recognizing the received serial number, calculating a copy count for the received serial number (62);

in response to the copy count not exceeding a first upper limit of software copies, sending an unlimited unlock key to the device (64) to allow the computing device having a copy of the software to run the copy of

the software with the serial number in an unrestricted manner; and

in response to the copy count being greater than the first upper limit but not exceeding a second upper limit, sending a first limited unlock key to the device (66), wherein the first limited unlock key allows a copy of the software on the computing device and having the serial number to run for a first period of time or a defined number of executions before requiring re-authorization to continue use of the copy of the software;

at the computing device, receiving one of the unlimited unlock key and the first limited unlock key and running the copy of the software in response to receipt of the unlimited unlock key or the first limited unlock key, wherein the first limited unlock key terminates running of the copy of the software after the first period of time or after the defined number of executions."

Claim 5 reads as follows:

"A system (60) for auditing software usage, comprising

i) an authorization authority having:

a receiver module adapted to receive a serial number for a software installed on a computing device and a unique device identifier for the device;

a transmitter module;

a processor module operatively coupled to the receiver and transmitter modules;

and

memory module operatively coupled to the processor module and comprising executable code for the processor module to;

determine whether the received serial number corresponds to one of recognized serial numbers;

in response to determination that the received serial number corresponds to one of the recognized serial numbers, calculate a copy count for the received serial number;

in response to the copy count not exceeding a first upper limit of software copies, instruct the transmitter module to send an unlimited unlock key to the device, to allow the computing device having a copy of the software to run the copy of the software with the serial number in an unrestricted manner; and

in response to the copy count being greater than the first upper limit but not exceeding a second upper limit, instruct the transmitter module to send a first limited unlock key to the device , wherein

the first limited unlock key allows a copy of the software on the computing device and having the serial number to run for a first period of time or a defined number of executions before requiring re-authorization to continue use of the copy of the software; and

ii) a multiplicity of computing devices of which at least some share a copy of the software that has the same serial number, wherein the computing devices that share the serial number are each arranged to run the copy of the software in an unrestricted manner in response to receipt of the unlimited unlock code or otherwise run the copy of the software in response to receipt of the first limited unlock code and wherein those computing devices running the copy of the software in response to the first limited unlock code are arranged to terminate running of the copy of the software after the first period or after the defined number of executions."

- X. At the end of the oral proceedings, the chairman announced the decision of the board.

Reasons for the Decision

Request for expedited processing

1. The appellant argued (see grounds of appeal, point 1.6) that its appeal "raise[d] fundamental issues in the examination of the Appellant's proprietary rights by the first instance of the EPO, [...] closely reflect[ing] the concerns raised by the Enlarged Board of Appeal in G0003/08 and, more particularly, the assessment of what amounts to 'technical' subject matter (in the context of an assessment to exclusion under Art.52(2) & (3) EPC) and the appropriateness of the current tests therefor, e.g. under T641/00-Comvik and T0154/04-Duns Licensing", and because "the subject-matter of the application [was] of commercial importance to the Appellant".

2. In the annex to the summons, the board observed that none of the appellant's reasons is expressly mentioned in the pertinent Notice from the Vice-President Directorate-General 3 dated 17 March 2008 (OJ EPO 2008, 220), that the alleged commercial importance of the application to the appellant was not substantiated in the grounds of appeal, and that it did not share the appellant's view that this appeal raised issues of such fundamental importance as to justify accelerated processing of this case. Therefore, the board did not allow the appellant's request for expedited processing.

Request for an interview with the rapporteur

3. The appellant requested that "the Rapporteur consent[] to an interview with the Appellant so that the Appellant m[ight] obtain an initial opinion that might expedite the appeal process by possibly avoiding the necessity for oral proceedings".

4. In the annex to the summons, the board noted that neither the EPC nor the Rules of Procedure of the Boards of Appeal foresee a right of the appellant to an interview with the rapporteur. In view of this and the case as a whole, the board deemed it appropriate and expedient to summons the appellant to oral proceedings under Article 116(1) EPC according to its corresponding request.

The invention

5. The application generally relates to digital rights management. According to the description, known digital software licenses allow customers to run a piece of software on a limited number of devices (p. 1, lines 22-23). For each device, software users request permission from an authorization server which keeps a record of how many devices have already been authorized (lines 15-17 and 19-20). When the predefined limit is exceeded, the request is denied (lines 17-18 and 20-21). Otherwise, a license is issued linked to the hardware platform of the device in question, based on a "unique identifier" generated from parameters of that computing hardware and its attached peripherals (lines 10-15).

- 5.1 It is also disclosed that software buyers have found this policy to conflict with their expectation "to be

able to use software they have purchased on as many devices as they want as long as they own and use the devices" (p. 1, lines 27-29; p. 2, lines 3-5) and because users change or modify their computing devices increasingly often (p. 1, lines 29-31).

5.2 It is concluded that this situation "requires additional flexibility on the part of the authorization authority to compensate for reasonable fluctuations in the usage circumstances of uses protected under laws such as the Fair Use Act" (p. 1, line 31 - p. 2, line 2).

5.3 As a solution it is proposed to move away from the "allow/disallow paradigm" (p. 8, lines 4-6) of the prior art. It is disclosed, for instance, that "all requests for authorization [might] be allowed" but the system might keep track and activate the copies with different restrictions. This is referred to as an "audit mode" (p. 8, lines 9-13). The claimed invention relates to a specific instance of this scheme, according to which the "audit/authorization authority" might allow "the software to run indefinitely [...] for up to a first [...] upper limit of copies of the software", whereas "[c]opies numbering greater than the first upper limit and not exceeding the second upper limit" might be allowed to run for a limited period of time or a defined number of executions "before requiring re-authorization to continue usage" (p. 8, lines 18-22; p. 9, line 20).

5.4 The server instructs the requesting computer in terms of so-called "unlock keys" or "unlock codes" (p. 8, line 14 - p. 9, line 5). For unlimited use permission, an "unlimited unlock key" is sent, whilst for limited use a "limited key is sent". The client is assumed to

act according to the instruction. For instance, it is disclosed that "the user [is] informed [...], and the application allowed to run" (p. 7, lines 10-11).

- 5.5 It is further disclosed that users who change or modify their hardware may have to re-activate the software. If they don't, the software is "terminated", otherwise the authorization process is repeated (p. 6, lines 8-18).

Original disclosure, Article 123(2) EPC

6. Claim 1 specifies that "running of the copy of the software [is terminated] after" expiry of the limited unlock key (see last three lines of claim 1 as cited above).
- 6.1 The application, however, discloses program termination only if the user chooses not to re-activate the program after a hardware change (p. 6, lines 8-12). What specifically happens in other cases, for instance when the limited use period has expired, is not disclosed in the application. It is conceivable that in such a case the software is not "terminated" but allowed to finish and only blocked from the next execution onwards.
- 6.2 Therefore, the board has remaining doubts as to whether the claims as presently worded comply with Article 123(2) EPC.
- 6.3 However, the board considers that the skilled person would understand from the application as a whole that execution of the software is automatically disabled on the client computer in accordance with the "unlock keys" (see p. 1, lines 27-29; p. 7, lines 10-11). It is stressed that the understanding *that* the client exercises some such control does not imply any details as to

how the client achieves this, and that the application does not disclose any.

- 6.4 For the purposes of the following discussion, the board construes the claims accordingly.
7. Claim 1 specifies that "the first limited unlock key [may] terminate[]" the software, which suggests that the "unlock key" is *active* in this respect. However, there is no disclosure of an active unlock key in the application. Claim 5, in contrast, specifies that the "computing devices [...] are arranged to run" or "to terminate running" of the software "in response to receipt" of the unlock keys, the unlock keys hence being specified as *passive*. In what follows, the board interprets the cited passage in claim 1 to correspond to that of claim 5.

Clarity, Article 84 EPC 1973, and claim construction

8. The board considers that the claims are sufficiently clear to allow an assessment of inventive step and, in particular, to allow a discussion of the main issues raised by the appellant.
9. The board however considers that the expression "serial number for software installed on a computing device" needs to be properly construed.
- 9.1 The appellant argued that the serial number must be construed as the number which is conventionally associated with an individually purchased copy of a piece of software and which the user enters in order activate the software. This was relevant, *inter alia*, because D1 did not disclose such a "serial number" (see below).

- 9.2 The board however notes that, for the purposes of the claimed method or system, the serial number must be construed as merely any number suitable for identifying the software which is "installed on a computing device" and which the user requests to run.

Technical character, Article 52(2,3) EPC

10. It is undisputed that the system according to claim 5 and the method according to claim 1 constitute technical subject-matter and thus inventions within the meaning of Article 52 EPC, for which European patents may in principle be granted (see in this respect G 3/08, point 10.7 and the cited jurisprudence of the boards of appeal).

The prior art

11. According to the application, figure 1 illustrates a "system and method for software copy control that is believed to be known in the art" (see p. 3, lines 21-22). Also the section on related art refers to "systems used in the art" having features relevant for the invention (see, in particular, p. 1, lines 19-26). During the oral proceedings, the appellant stated that it could not produce a piece of prior art disclosing the features described as known in the application and therefore disputed in particular that the content of figure 1 was prior art for the present application. This issue was not further discussed with the appellant.
12. D1 discloses a license management system to account for software product usage (see abstract, lines 1-2). The system is depicted in figure 1. The rights owner, "producer 28", "gives [an] issuer 25 authority to grant li-

censes on its behalf". A "license document generator program 26" is disclosed to "generate[] a license", usually as the result of a negotiation between users (see col. 9, lines 61-67). The licenses are stored (as "product use authorizations") in a database (see fig. 1, no. 23; col. 9, line 67 - col. 10, line 8). A "license server" (see no. 10) manages this database and so-called "units" of the licenses (col. 6, line 44). A user node desiring to execute a piece of software, "identif[ies] itself by user, platform, process, etc.", the license server checks whether the software is allowed to "operate under the license terms" (col. 6, lines 24-27; col. 7, lines 3-6) and, in particular, whether a sufficient number of "units" are available to allow the request. Accordingly, the request is either granted or denied, for instance by transmitting a "grant or denial status that can be used to decide whether "to permit use of the product or product features" (see, e.g., col. 20, line 3-7). After use, the units might be returned or consumed (see col. 6, lines 42-50). D1 discloses that "vendors should have available a wide variety of terms and conditions" when negotiating licenses and that licenses may be priced depending on how permissive they are (see col. 1, lines 41-55; col. 6, lines 15-18). As a specific example, D1 discloses that a license might "allow only five users at any given time to use the product" (col. 19, lines 18-26).

Differences between the invention and the prior art

13. During the oral proceedings, the board agreed with the appellant that the inventive step of the claimed invention should be assessed starting from D1.

13.1 The appellant argued that the claimed "authorization authority" responsible for verifying software licences had to be identified with the "license issuer 25" (see fig. 1 and col. 9, line 29-37) according to D1 because it was exclusively the vendor to issue licenses. The board is not convinced by this argument. Although the licenses are issued by the vendor, they are managed by the "license management server" 10, and it is the latter from which clients request permission to run a piece of software and receive the "grant or denial status". The board thus considers that the license management server of D1 qualifies as the claimed "authorization authority responsible for verifying software licenses".

13.2 The board further considers that the server message granting a requested software qualifies as the claimed "unlimited unlock key" allowing execution of the software "in an unrestricted manner".

13.3 In the board's view, therefore, the invention according to claim 1 differs from D1 by the following features.

- 1) the requested software is represented by a "serial number";
- 2) the units represent a "copy count" rather than the "cost" or "value" of a requested use (see D1, col. 6, lines 57-61, and grounds of appeal, point 7.12);
- 3) the claimed "copy count" increases with every "copy" whereas the number of available units according to D1 decreases with every allocation of an available unit;

- 4) unlimited use of the software is only granted up to a given copy count, and for a copy count above that but below a "second upper limit" a limited use is granted, where the latter server response is communicated to the client in terms of a "limited unlock key"; and
- 5) the "limited unlock key" expresses permission to run the software only for a limited period of time or a limited number of executions.

Assessing the inventive step of "mixed inventions"

14. The appellant argued that the examining division, misled by T 641/00 (OJ EPO 2003, 352), applied the outdated "contribution approach". The board disagrees.
- 14.1 The "contribution approach" is typically understood as a test determining whether the difference between the claimed invention and the prior art lies exclusively in a field excluded from patentability under Article 52(2) EPC and, if so, finding that claimed invention as a whole does not comply with Article 52(2,3) EPC. That is, according to the contribution approach, compliance of an invention with Article 52(2,3) EPC is determined only in view of its *contribution* over the prior art. This approach was abandoned in T 1173/97 (OJ EPO 1999, 609, reasons 8; see also G 3/08, OJ EPO 2010, 10, reasons 10.6) which found that compliance with Article 52(2,3) EPC can be established by features already known in the art.
- 14.2 The approach based on T 641/00, relates to the assessment of whether an invention comprising technical and non-technical features involves an inventive step over the prior art. Evidently, an inventive step *vis-à-vis*

the prior art depends on the "contribution" the claimed invention makes over the prior art. Establishing this contribution is necessary in any method of assessing inventive step, T 641/00 included, but is not equivalent to the "contribution approach" as explained above.

15. In more general terms, the appellant takes issue with the fact that the assessment of inventive step based on T 641/00 involves referring to Article 52(2,3) EPC - and thereby allegedly mixes the requirements of Articles 52 and 56 in an inappropriate manner. In this respect, the board notes the following.
 - 15.1 It is well-established jurisprudence of the boards of appeal that an inventive step can only be acknowledged for an invention which makes a *technical contribution* to the art (see, *inter alia*, T 38/86, OJ EPO 1990, 384, headnotes; T 1173/97, reasons 8; T 1784/06, reasons 2.1), *i.e.* a contribution in a technical field. Furthermore, the jurisprudence of the boards of appeal has developed the understanding that the subject-matter excluded from patentability by way of example in Article 52(2,3) EPC concerns fields considered to be non-technical (see T 931/95, OJ EPO 2001, 441, reasons 2; and T 1173/97, reasons 5.2).
 - 15.2 It is true, therefore, that the established way of assessing inventive step under Article 56 EPC makes reference to Article 52 EPC. However, this does not mean that the assessment of both requirements is "mixed" (see on this point T 1784/06, reasons 2.2). Contrary to the appellant's argument, the assessment of the requirements of Articles 52 and 56 EPC remains separate.

15.3 As regards G 3/08, the Enlarged Board indeed expressed surprise that the referred questions did not relate to the assessment of inventive step (see reasons 10.13.2, first sentence) and speculated (*ibid.*, second sentence) that "the President could not identify any divergence in the case law on this issue, despite the fact that (at present) approximately seventy decisions issued by a total of fifteen different Boards [...] cite T 641/00, COMVIK (OJ EPO 2003, 352), and over forty decisions by eight Boards cite T 258/03, Hitachi, the decisions which essentially defined the approach" and concluded that the case law appeared to have "created a practicable system for delimiting the innovations for which a patent may be granted" (*ibid.*, last sentence). Obviously, the Enlarged Board could not be sure of the President's precise reasons for referring these and not other questions, since "speculation" is not "certainty" as the appellant put it (see grounds of appeal, point 6.6). This however is insufficient to conclude that the Enlarged Board of Appeal itself had identified a divergence that could have justified another referral under Article 112(1)(b) EPC. It thus cannot be said that the Enlarged Board in G 3/08 has questioned the correctness of the "COMVIK approach".

The alleged divergence in jurisprudence

16. The appellant has suggested that decisions T 1051/07 and T 1769/10, both delivered by board of appeal 3.4.03 in the same composition, had introduced a "new approach" for assessing the inventive step of mixed inventions.

16.1 The present board notes that the same argument was made by the appellant before that board and was explicitly rejected by it (see T 1769/10, reasons 4.2, first para-

graph and the paragraph at the bottom of page 10). It is therefore clear that the board in question did not intend to deviate from the established approach based on T 641/00. This is consistent with the fact that, as the appellant points out (grounds of appeal, point 6.26), that board did not itself refer questions to the Enlarged Board of Appeal based on an "apparent divergence in approach".

- 16.2 The appellant claims that, in particular, the last few lines of point 4.2 of the reasons in T 1769/10 defined the "new approach". Whereas the appellant emphasised the last nine lines of that section only (see grounds of appeal, point 6.21), the board finds it appropriate to cite one more sentence. The last fourteen lines of that section read as follows (emphasis by this board):

"Accordingly, depending on the available prior art and what is claimed, the objective technical problem to be solved may be formulated generally as to implement technically (the constraints as imposed by) the aim to be achieved in the non-technical field. In the case were some general form of implementation of the aim to be achieved in the non-technical field is already known from the prior art, the objective technical problem to be solved may be formulated more specifically as how to implement technically the aim in the non-technical field, or, reworded, to provide a technical solution involving technical means how to achieve the aim in the non-technical field."

From the reasons set out in decision T 1769/10 it is clear that this section is intended to paraphrase the established jurisprudence of the boards of appeal rather than to define a new approach. The board does not find that this section implicitly defines a new

approach either. Rather, it appears to be entirely consistent with the established jurisprudence according to which an "aim to be achieved in a non-technical field" could impose "constraints" on the technical solution sought (cf. T 641/00, headnote 2).

- 16.3 According to the appellant, the new approach according to T 1769/10 meant that it was "now a question of 'how' something is achieved, rather than 'what' is achieved by the claim in its entirety" (see *e.g.* grounds of appeal, point 6.26). The board does not accept this proposition either, because the cited passage explicitly acknowledges that the aim to be achieved in the non-technical field (the "what") imposes constraints on the technical solution (*i.e.* the "how").
- 16.4 Furthermore, the appellant argues that the approach according to T 1769/10 operated "at the macro-level of considering the totality of the claim and how the effect is achieved", whereas the approach based on T 641/00 operated on the "micro-level" and was based on a "one-at-a-time" and "feature-by-feature" analysis which was irreconcilable with T 1769/10 (see the letter of 3 July 2015, points 5.2, 5.3 and 5.7). Again, the board does not see any evidence for this characterization of the allegedly different "approach" based on the written reasons given in T 1769/10.
- 16.5 The representative argued during the oral proceedings that he knew that board 3.4.03 had applied a new approach because he had represented the appellant in case T 1769/10. In this regard the board points out that it cannot take into account, when interpreting a decision of the boards of appeal (or any other decision or judgment for that matter), non-verifiable assertions about what a member of the board may have said during

oral proceedings. The board must limit itself to the reasons given in the written decision.

- 16.6 The board also remarks that the facts before the board in T 1769/10 are substantially different from those in the present case, *inter alia* because the claims in that case contain more technical detail than the claims in the present one. The appellant's statement in the oral proceedings in this respect that the additional detail in that case had been necessary to establish an inventive difference over the prior art but was not needed to establish a *technical* contribution of the claimed subject-matter does not affect the board's conclusion.
- 16.7 Whether the present board might have come to a different conclusion based on the facts in case T 1769/10 is immaterial to the question of a possible divergence in approach, as argued by the appellant, between that decision and the jurisprudence based on T 641/00.
- 16.8 Finally, the board notes in passing that also T 1769/10 does not give a closed definition of what the board considers to be "technical".

The board's approach in this case

17. The board has assessed the inventive step of the claimed invention based on the established jurisprudence. Accordingly, the board considers that
- (a) an inventive step for an invention comprising "non-technical features" can only be acknowledged if and to the extent that the features of the claimed invention in combination solve a *technical*

problem vis-à-vis the prior art in a non-obvious manner, and that

(b) it is legitimate for an aim in a non-technical field to appear in the formulation of the technical problem to be solved as a constraint that has to be met (see T 641/00, headnote 2).

17.1 The appellant has criticized this approach as being based on a "one-at-a-time", "feature-by-feature" and "micro-level" analysis of the invention. The board however points out that, by assessing the technical contribution which the claimed features make within the context of the claimed invention as a whole according to (a), an inappropriately fragmented analysis of the claimed invention may be avoided.

17.2 The appellant also argued during the oral proceedings that an assessment based on this approach would be based on hindsight, in particular due to (b). The board acknowledges that this risk does exist, noting however that this risk exists generally in the examination of the inventive merit of an invention in full knowledge of the invention. As regards the "COMVIK approach", the board agrees that efforts must be made to apply it in a fair manner (see T 928/03, reasons 5.3.3) and that the objective technical problem formulated in this context should not be a merely academic or a contrived one but one that can reasonably be assumed to have arisen at the priority date (see, e.g., T 905/09, reasons 9; and T 632/10, reasons 5.2).

18. Returning now to the differences between the claimed invention and D1 as established above, the board finds as follows.

18.1 Differences 2), 4) and 5) relate primarily to the terms and conditions of the license in question. In the board's view, it is up to the rights owners whether they want to limit the number of "copies" made of a given piece of software and to grant one set of rights for the first number of copies and a different, limited set of rights subsequently for a second number of copies. Moreover, the board takes the view that the rights owner will make that choice according to legal, economic and administrative considerations rather than technical ones. The board considers that the content of the license does not contribute to the technical character of the invention and thus cannot contribute to inventive step according to T 641/00 (headnote 1).

18.2 The application mentions a software user who is discontent that, given a license for five copies, a copy for his sixth device may simply be denied (p. 1, 2nd and 3rd para.) This situation might arise, for instance, in D1 (col. 19, lines 18-26). Likewise, a company having acquired a license to install, say, 50 copies of a piece of software may find that it needs a 51st copy at some point, for instance for an unforeseen intern. These situations are obviously undesirable for the users. As the application also suggests, it might be argued that these situations are contrary to some legal requirement (see p. 2, lines 1-2). Under such circumstances, the board regards it as realistic that vendors, in order to accommodate a customer's request and/or to avoid legal difficulties (see also T 632/10, reasons 5.3), *i.e.* for non-technical reasons, might offer a license covering the unlimited use by a fixed number of users and a time-limited use by an additional number of users.

19. The board therefore considers that the appropriate objective technical problem solved by the invention - especially by differences 2), 4) and 5) - is to implement in the system of D1 the given policy according to which usage of the software is granted with full or limited functionality depending on the copy count.
- 19.1 This problem can be reasonably assumed to have arisen at the priority date in the use of the system according to D1, and notes that it corresponds well with the problem addressed explicitly in the present application (p. 1, 3rd para. - p. 2, 2nd para.). The board is therefore satisfied that this objective technical problem is neither based on hindsight nor on a distorted analysis of either the invention or D1.
- 19.2 The appellant argued in the oral proceedings that the appropriate technical problem solved by the application is "how to increase the effectiveness, in terms of software functionality, of the totality of a network". The board disagrees that this is the correct objective technical problem in particular because it does not take account of the effect achieved by difference 4), *i.e.* the use of a limited unlock key, which is specifically claimed and which is the central feature by means of which the application is meant to go beyond the "allow/disallow paradigm" (see p. 8, lines 5-6).
- 19.3 The board also disagrees with the appellant's claim that the "shift away from the allow/disallow software operating paradigm" and the provision of the new "paradigm" to "degrade or adapt software functionality as a function of time and distribution to other computing platforms" (see grounds of appeal, points 5.1 and 6.19) constitutes a technical problem. Apart from the fact that no feature of claims 1 and 5 can be

linked to the specific effect of modifying software functionality "as a function of time and distribution", the board considers that the new "paradigm" is not a "software operating paradigm" but a non-technical "licensing paradigm".

19.4 In order to solve the objective technical problem defined above, the board finds it obvious for the skilled person to provide a third return code to the server, other than grant and denial, which would instruct the requesting client to allow only the limited functionality. It is emphasized that

(i) the license determines *what* the client is supposed to do, namely allowing the software to run only for a given period of time or number of executions,

(ii) the fact *that* the client implements the policy is, in principle, known from D1 and also implied by the problem "to implement the policy" as formulated above, and

(iii) neither the claim nor the description contains any details as to *how* the client actually enforces the policy.

19.5 Regarding difference 1), the board reiterates its opinion that the serial number must be construed as any number suitable for identifying the software of interest. In the field of computing, the board regards it as elementary to use "serial numbers" as identifiers. Likewise, it is obvious to use a "device identifier" to bind a license to a particular computer (cf. in this respect, D1, col. 6, line 64 - col. 7, line 1; and col. 19, lines 15-18).

- 19.6 Regarding difference 3), the board considers "counting up" to a supply limit to be an obvious alternative to "counting down" from an initial supply number of "units".
- 19.7 In summary, the board concludes that claim 1 lacks an inventive step over D1, Article 56 EPC 1973.
20. Claim 5 differs from claim 1 in that, amongst the computing devices, "at least some share a copy of the software that has the same serial number". At least in view of the broad interpretation of the term "serial number", as explained above, the board considers that this difference does not affect the assessment of its inventive step as a whole. Therefore, also the appellant's request based on only claims 5 and 6 fails for lack of an inventive step over D1, Article 56 EPC 1973.

The request to refer questions to the Enlarged Board of Appeal

21. In this case Article 21 RPBA does not oblige the board to refer questions to the Enlarged Board of Appeal as it is not deviating from an earlier decision or opinion of the Enlarged Board of Appeal.
22. According to Article 112(1)(a) EPC, the board shall refer questions to the Enlarged Board of Appeal only if it considers that a decision is required in order to ensure the uniform application of the law or if an important point of law arises. The answer to a referred question should not be merely of theoretical or general interest, but has to be essential for reaching a decision on the appeal in question (see, e.g., G 3/98; OJ EPO 2001, 62; reasons 1.2.3).

- 22.1 The board does not consider that a referral is necessary in the present case to ensure the uniform application of the law. Firstly, as explained above, the board is not convinced that a divergence in approach between T 641/00 and T 1769/10 or T 1051/07 has been established. Even assuming, for the sake of argument, that the cited decisions did constitute a divergence from T 641/00, the fact remains that the jurisprudence based on T 641/00 has now been applied for well over a decade and developed into what is perceived by many to be a practicable system for assessing the inventive step of mixed inventions (see again G 3/08, reasons 10.13.2). In such a situation, the board considers that a very small number of decisions diverging from established jurisprudence on a particular question will typically not jeopardize the uniform application of the law.
- 22.2 To the extent that the questions proposed by the appellant are clear and pertinent to the present case, the board does not consider that answers to them by the Enlarged Board of Appeal are required to decide on the case at hand.
23. In particular, the board makes the following observations regarding the proposed questions.
- 23.1 Q1 seeks to obtain the Enlarged Board of Appeal's approval of an alternative approach to the assessment of the inventive step of mixed inventions which, in the board's view, has no basis in the jurisprudence of the boards of appeal. Given that the interpretation of the EPC is generally entrusted to the boards of appeal (see G 3/08, reasons 7.2.5) and no divergence has been identified, an answer by the Enlarged Board of Appeal

to this question is not required to decide on the present case. The same applies to Q9, which is moreover unclear insofar as T 154/04 makes no recommendation regarding the "approach in Q1".

23.2 Regarding Q2, the board considers that a commercial advantage cannot, by itself, "take on a technical nature". If, however, and to the extent that "a corresponding claim element provides a technical contribution and/or further technical effect", that claim element will have to be taken into account for the assessment of inventive step. As regards Q11, it is unclear what is meant by an "underlying advantage" (of a "commercial effect") "which may not easily align with an easily identifiable technical problem" and what it means for such an "advantage to be considered patentable, but at least worthy of consideration". As stated above, any technical effect of an invention must be taken into account (and is thus "worthy of consideration") regardless of whether it relates to or "underlies" a commercial effect. In this regard it is unclear why the appellant cites the generation of "a random result in a game" as discussed in T 12/08 as an illustration of what it considers to be a "commercial effect".

23.3 Regarding Q3, the board considers, as set out above, that the cited passage from the reasons of T 1769/10 was intended to paraphrase the approach based on T 641/00 and, therefore, requires no interpretation.

23.4 Q4, Q7 and Q13 seek to propose, as a threshold for acknowledging a "technical contribution" or a "technical effect" the "merest scintilla of an advantage that causes *in practical reality* the technical implementation of the claimed arrangement to operate in a better,

faster, more secure and/or more reliable fashion" (Q4) or "a surprising effect/advantage *in practical reality*" (Q7 and Q13). The board considers the proposed criteria to be unclear, for instance as regards the notions of what is "better" or "surprising" or what is "practical reality". Moreover, the proposed criteria are not regarded as being in conflict with the established approach to assessing inventive step. For instance, an increase in the speed of a technical implementation (see Q4) would typically be accepted as a technical effect by the boards of appeal, and a "surprising effect" enters into the assessment of inventive step if it is also found to be a technical one (see Q7, Q13). With regard to Q13, the board observes that the appellant seems to suggest that a "further technical effect" corresponds to a "a surprising effect/advantage *in practical reality*". The board disagrees with this implication. The term "further technical effect" was introduced in T 1173/97 in the context of the patentability requirements under Article 52(2,3) EPC, and the decision specifically stated that, for this purpose, it was immaterial whether the further technical effect was known in the art (T 1173/97, reasons 8). Therefore, the "further technical effect" as used in T 1173/97 need not correspond to any surprising effect or advantage over the prior art.

- 23.5 The answers to Q5, Q6 and Q12 are immaterial to the present case, as the current claims do not, as a whole, "claim [or dictate] control of human behaviour" and because no "program for a computer" is claimed. Answers to Q8 and Q14 are unnecessary for a decision on the present case, as the claimed subject-matter does not "provide a choice to an individual".

- 23.6 The board finds that Q10 is already unclear because it does not agree with the appellant that T 1769/10 defines a "new approach" or what it should be.
- 23.7 As regards Q15, it is noted that the Enlarged Board of Appeal stated in G 3/08 that the established jurisprudence at the time was consistent and practicable. The appellant has not established to the board's satisfaction that this situation has since changed.
- 23.8 As regards Q16, the board agrees that the term "technical" is not defined in the EPC or in the jurisprudence of the boards of appeal. The term "technical" thus requires interpretation by the boards. As explained above, the list of non-inventions according to Article 52(2) EPC is considered to illustrate what is not technical; that is, the matter excluded from patentability is generally considered to be non-technical matter. The boards therefore interpret what is or is not technical in each individual case before them using their judgment in view of Article 52(2,3) EPC.

Order

For these reasons it is decided that:

1. The request to refer questions to the Enlarged Board of Appeal is refused.
2. The appeal is dismissed.

The Registrar:

The Chairman:



B. Atienza Vivancos

W. Sekretaruk

Decision electronically authenticated