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Datasheet for the decision of 22 December 2011

Case Number: T 0449/10 - 3.5.01

Application Number: 00955281.1

Publication Number: 1204913

IPC: G06F 1/00

Language of the proceedings: EN

Title of invention:
Methods and systems for transaction record delivery using thresholds and multi-stage protocol

Patentee:
Intertrust Technologies Corp.

Opponent:
Societé Française du Radiotéléphone

Headword:
Transaction processing/INTERTRUST

Relevant legal provisions:
-

Relevant legal provisions (EPC 1973):
EPC Art. 56, 100(a)

Keyword:
"Inventive step - main request, first and second auxiliary requests (no)"
"Admission of late-filed requests - third and fourth auxiliary requests (no)"

Decisions cited:
-

Catchword:
-

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Case Number: T 0449/10 **-** 3.5.01

D E C I S I O N
of the Technical Board of Appeal 3.5.01
of 22 December 2011

Appellant: (Patent Proprietor)	Intertrust Technologies Corp. 4750 Patrick Henry Drive Santa Clara, CA 95054 (US)
Representative:	Williams, Michael Ian Cleveland 40-43 Chancery Lane London WC2A 1JQ (GB)
Respondent: (Opponent 1)	Societé Française du Radiotéléphone Tour Séquoia 1, Place Carpeaux 92915 Paris la Défense Cedex (FR)
Representative:	Debay, Yves Cabinet Debay 126 Elysée 2 78170 La Celle Saint Cloud (FR)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted 5 January 2010 revoking European patent No. 1204913 pursuant to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman: S. Wibergh
Members: R. R. K. Zimmermann
D. Prietzel-Funk

Summary of Facts and Submissions

I. European patent number EP 1 204 913 concerning the management of communications between computer systems involved in a transaction evolved from Euro-PCT application publication number WO 01/09702 and had taken effect on 5 October 2005.

II. Claim 1 of the patent as granted reads as follows (numbered angle brackets [1]<> to [3]<> are added for convenience of reference):

> 1. A method of granting access to a piece of content (118) at a first computer system (104) in a networked computing environment including said first computer system (104) and a second computer system (102), the method including:
> sending a request from the first computer system (104) to the second computer system (102), the request seeking permission to access the content (118);
> initiating execution of an acknowledgement-monitoring process at the first computer system (104), the acknowledgement-monitoring process [1]<> being operable to:
> (a) detect a second acknowledgement from the second computer system (102), the second acknowledgement indicating that the second computer system (102) received a first acknowledgement from the first computer system (104); and
> (b) send a third acknowledgement to the second computer system (102) if the second acknowledgement is not received by the first computer system (104)

in response to the first acknowledgement [2]<and if a predefined condition is satisfied>;
receiving the request at the second computer system (102);
determining at the second computer system (102) whether to grant the request;
sending a status indicator from the second computer system (102) to the first computer system (104), the status indicator including an indication that the request has been granted;
receiving the status indicator at the first computer system (104) and releasing the content (118) to a user[3]<>;
sending the first acknowledgement from the first computer system (104) to the second computer system (102), the first acknowledgement indicating that the content (118) was successfully released to the user;
receiving the first acknowledgement at the second computer system (102);
sending the second acknowledgement from the second computer system (102) to the first computer system (104);
receiving the second acknowledgement at the first computer system (104);
terminating execution of the acknowledgement-monitoring process.

III. The patent had been opposed by two opponents on various grounds, among others for lack of inventive step in the light of the relevant prior art, notably prior art document WO 93/01550 (document D1), and for added subject matter in claim 1 as granted.

Having decided on several requests for amendment, all disallowed inter alia for added subject matter and lack of inventive step, the opposition division revoked the patent by a decision issued in writing on 5 January 2010.

IV. The patent proprietor lodged an appeal against the revocation decision on 2 March 2010 and paid the appeal fee on the same day. With filing the grounds of appeal, the appellant reverted to the claims as granted as main request and included an auxiliary request 1 that corresponded to one of the requests before the opposition division and new auxiliary requests 2 to 4 for amended claims.

V. In response to summons to oral proceedings, the appellant amended the second, third, and fourth auxiliary requests by filing new requests with letter dated 28 October 2011, maintaining the main request and the first auxiliary request as filed with the grounds of appeal. Claims 1 of the first and second auxiliary request are amended in respect to claim 1 as granted at the passages indicated by numbered angle brackets in claim 1 above, the amended passages being as follows:

- In claim 1 of the first auxiliary request,
  [2]<…> reads "within a predefined time period".

- In claim 1 of the second auxiliary request,
  [1]<> reads "comprising a background thread in a transaction processing application (112), and";
  [2]<…> reads "within a predefined time period";

[3]<> reads ", wherein the process of releasing the content to the user proceeds independently of the acknowledgements-monitoring process".

VI. The respondent (opponent I; opponent II had withdrawn its opposition) has replied to the appeal and commented on the new requests filed by the appellant, thereby maintaining the objections already raised against the patent and objecting to the new requests filed by the appellant.

VII. In oral proceedings held before the Board on 30 November 2011 the matter was discussed with the parties.

The appellant has requested that the decision under appeal be set aside and the patent be maintained on the basis of the claims as granted (main request), or on the basis of the first auxiliary request filed with the grounds of appeal, or the second to fourth auxiliary requests filed with letter dated 28 October 2011.

The respondent has requested that the appeal be dismissed.

VIII. Among other matters discussed with the parties were the admission of the third and fourth auxiliary requests late filed in the appeal proceedings, the admissibility of amendments in regard to the main request, and the patentability of the subject-matter claimed in regard to the first auxiliary request.

IX. The arguments presented by the parties, as far as relevant to the present decision, can be summarised as follows:

Regarding the admission of the requests submitted, the appellant explained that the main request and the first and second auxiliary requests had already been filed with the grounds of appeal, except that the higher numbered claims 4 ff. of the second auxiliary request had now been deleted. Only the third and fourth auxiliary requests had not been presented in the first instance proceedings. Since, however, these requests had been filed more than one month in advance of the oral proceedings and they only narrowed the subject matter of the claims, they should be admitted to the proceedings.

The respondent, referring to the appellant's main request, objected to feature (b) of claim 1 as granted as unclear and not supported by the description. In addition, this feature was not present in the original application, thus justifying the revocation of the patent as granted.

The appellant disagreed, stating that the feature objected to was clearly disclosed in original claims 4 and 8 and supported by the description e.g. page 5, lines 17 to 30 and page 18, line 22 to page 20, line 4 of the published international application. The term "acknowledgement" was used in the application in a broad sense; "third acknowledgement" encompassed signals in different embodiments; it could mean the signal provided by resending the first acknowledgement, the copy of an audit record, or the error message or

warning provided by the resend job 305 as shown in figure 3G.

Referring to threat modelling used in the decision under appeal as a systematic method to separate technical and non-technical subject matters, the appellant criticised this line of reasoning as artificial and complex and as inconsistent with the case law regarding the problem and solution approach. The invention was trivialised and the technical problem solved misunderstood. Although the invention applied to business transactions, the business considerations were nevertheless not relevant to the invention. The invention was about computer security, which was undoubtedly a field of technology.

The invention solved the technical problem of improving the security of the communications between two computer systems. To this end, the invention proposed the communication protocol claimed, which ensured the synchronisation of the two computer systems. Through this synchronisation, both computer systems were informed on the status of the respective other system. Such a synchronisation was nowhere disclosed in the prior art. Document D1, the agreed closest prior art document, only allowed for a request and a response signal, the latter authorising the transaction. It did not use any first, second, and/or third acknowledgement signals and did thus not provide those means which rendered communications on the basis of the present invention inherently secure.

In addition, according to the invention, the release of content and the monitoring of acknowledgements was

allocated to separate and independent processes, for example the acknowledgement-monitoring process to a background thread of the transaction processing application as defined in claim 1 of auxiliary request 2. This made it even more difficult to dissemble malicious manipulations of transactions and further increased the security of the computer systems.

X. At the end of the oral proceedings, the Chairman announced that the debate was closed and the decision would be issued in writing.

Reasons for the Decision

1. The appeal, although admissible, is not allowable since the main request for maintaining the patent unamended is prejudiced by the grounds of opposition under Article 100(a) in connection with Article 56 EPC 1973, and the first and second auxiliary requests for maintaining the patent in amended form concern inventions which do not involve an inventive step in the sense of Article 56 EPC 1973; the third and fourth auxiliary requests have not been admitted by the Board.

Lack of inventive step

2. Document D1 is undisputedly an appropriate starting point in the prior art for assessing inventive step. The document relates to a license management system and method for recording and controlling the use of a licensed product as summarised in the abstract of the document. The licensed product, for example computer software, a video product etc, is located at a network

node on the licensee's site, which is optionally a computer connected via a computer network to a computer system at a licensor's site (cf D1, page 7, line 25 to page 8, line 6 and page 25, lines 13 to 16 in connection with figure 1). The license management method of document D1 may thus be recited, in terms of the present claim 1, as a method of granting access to a piece of content at a first computer system in a networked computing environment including the first computer system (at the licensee's site) and a second computer system (at the licensor's site).

3. Furthermore, the license management method of document D1 comprises the following steps: sending a request from the first computer system to the second computer system (request datagram 3, see figures 1 and 3, and page 11, lines 4 to 28), the request seeking permission to access the content, receiving the request at the second computer system (cf figure 3, step 107.0), determining at the second computer system whether to grant the request (step 108.0), sending a status indicator from the second computer system to the first computer system (step 109.0), the status indicator including an indication that the request has been granted (approval, authorisation code 0, see for example D1, page 24 f.), receiving the status indicator at the first computer system (step 105.0) and releasing the content to a user (step 106.0 in figure 3, cf D1, page 20, line 9 ff.).

4. At the licensee's site, a monitoring process is executed which detects whether a reply datagram has been received within a "Wait Interval" (see figures 3 and 5, 104.0 to 104.3). If the reply datagram is not

received the monitoring process produces a warning (see e.g. D1, page 18, lines 22 to 26). The prior art method also provides for a termination of the monitoring process (step 105.3, see figure 5 and page 20, lines 1 to 4).

In the light of the prior art method of document D1, the invention is characterised in claims 1 of the main request and the first auxiliary request essentially by the following features (paragraphing numbers added for convenience of reference):

i. sending the first acknowledgment from the first computer system to the second computer system, the first acknowledgment indicating that the content was successfully released to the user;
ii. receiving the first acknowledgment at the second computer system;
iii. sending the second acknowledgment from the second computer system to the first computer system;
iv. receiving the second acknowledgment at the first computer system;
v. monitoring acknowledgements by
    (a) detecting a second acknowledgment from the second computer system by means of the acknowledgement-monitoring process, the second acknowledgment indicating that the second computer system received a first acknowledgment from the first computer system; and
    (b) sending a third acknowledgment to the second computer system by means of the acknowledgement-monitoring process if

- the second acknowledgment is not received by the first computer system in response to the first acknowledgment and if a predefined condition is satisfied (claim 1, main request), or if
- the second acknowledgment is not received by the first computer system in response to the first acknowledgment within a predefined time period (claim 1, first and second auxiliary requests), respectively.

Claim 1 of the second auxiliary request comprises the following additional features distinguishing the invention from the prior art of document D1:

vi. the acknowledgement-monitoring process comprises a background thread in a transaction processing application;

vii. the process of releasing the content to the user proceeds independently of the acknowledgement-monitoring process.

5. The conditions in feature v.(b) above for sending the third acknowledgement differs between the main request and the auxiliary requests. According to the main request there are two conditions: first, "the" second acknowledgement is not received in response to the first acknowledgment, and second, a predefined condition is satisfied. Whereas the condition of not receiving the second acknowledgement within a predefined time period according to the auxiliary requests does not pose any problems of construction, the two conditions in claim 1 of the main request

require an interpretation regarding the technical meaning of these conditions.

Original claim 8 contains a similar definition including a "predefined condition". Original claim 9 dependent from claim 8 defines that "the predefined condition comprises a predetermined amount of time elapsing from the time that the first acknowledgment was sent to the remote computer system". Therefore, in absence of any other substantial differences, the subject matter of first auxiliary request may be construed as an embodiment falling under the terms of claim 1 of the main request. Lack of inventive step in respect to the first auxiliary request thus implies lack of inventive step in respect to the main request.

6. The term "acknowledgement" as used in these claims (and in the application) is another definition that requires closer consideration. In the field of computer networking and telecommunications the normal meaning of the term acknowledgement is a reply signal transmitted to indicate that some data has been received correctly.

None of the acknowledgements defined in the claims fits under such a definition.

7. According to the claim definition, feature i. above, the "first acknowledgement" indicates that the content was successfully released to the user. Thus, the primary function of the signal is not to acknowledge the receipt of a signal but to inform the second computer system, i.e. the licensor, about the successful release of the content. The side-effect that the licensor might conclude from the message that the

status signal granting the previous request had correctly been received beforehand by the first computer system, i.e. the licensee, does not render the message an acknowledgement within the normal technical meaning of the term.

8. Somewhat more intricate is the construction of the "second acknowledgement", which according to feature v(a) above indeed signifies receipt of a signal. However, this feature is not consistent with the embodiments disclosed in the description. As shown in figure 3D and described at page 16, line 29 ff., the completion of the transaction, including withdrawal of funds from the consumer's account etc, is the actual event triggering the second acknowledgement, the resend-acknowledgement 336 as termed in the description. The second "acknowledgement" does not acknowledge receipt of any signal, but it is again a simple message indicating the completion of the transaction.

9. Finally, the "third acknowledgement" is only sent to the second computer system if the "second acknowledgement" has not been received, i.e. the function of this signal is the opposite of an acknowledgement; according to the embodiments disclosed in the application, the third acknowledgement is a resent first acknowledgement (cf RSCX 328 in figure 3F). It has thus the same function as the original first acknowledgement.

10. The principal function of the first, second and third acknowledgements is thus not acknowledging, but exchanging information between the respective licensing partners about the status of a licensing transaction

and whether the content has been released and the payment made.

Which information and in which order such information should be exchanged between the licensing partners are determined by legal and business considerations. It is still within the realm of doing business to organise the licensing transactions and to decide what to do if a certain required piece of information has not been received by one of the partners, or provide consequences for offenses against the agreed terms or general procedure. The circumstance that the management of the licences and the distribution of content are to be conducted online through a distributed computer system and the business operations thus have to be clearly and logically organised to be implemented successfully as software on a computer system does not change the character of such activities: they essentially require knowledge in - per se non-technical - business matters.

11. The field of technology is only entered at the stage of programming and implementing a concrete software project. Technical features of such a system which follow directly from the business requirements or which can be attributed to the common technical knowledge of the skilled person in the associated fields of technology, although providing a technical contribution over the prior art, do not involve an inventive step.

12. In the light of document D1, the invention claimed is characterised by exchanging two additional signals between the licensing partners concerning the status of

the transaction, namely the successful release of the content and the end of the transaction.

13. From a technical point of view exchanging such data serves no meaningful purpose; keeping record of the two additional pieces of information makes sense only under business aspects.

14. The acknowledgement-monitoring process of feature v above is a solution of a common problem in communications systems, namely that a message should, but in fact does not, arrive at the receiver. The standard procedure that faces this situation is a kind of watchdog which triggers a corrective action. Such a watchdog is implemented in document D1 for monitoring the status signal (reply datagram) from the licensor's site to the licensee (see document D1, figure 3, step 103.0 and figure 5 steps 104.1 and 104.2). Sending a warning or resending the message are possible options, but the decision for the one or the other depends on the particular organisation of the individual licensing process. The particular consequences are thus determined on the basis of business considerations rather than technical considerations.

15. Referring now to the second auxiliary request, the two additional features vi and vii concerning the acknowledgement-monitoring process and the process of releasing the content to the user do not present any new inventive aspects. It is common practice to organise software in functional subunits like functions, subroutines etc (an example is given in document D1, at page 20, line 2 ff.). Common operating systems organise processes in small units called threads that share

resources but can be executed independently. Separating the release process from the monitoring process so that they "proceed independently" (feature vii above) is anticipated in document D1, where the monitoring process (license check monitor 2, see figure 1) operates independently from the functional portion (executable portion 1A), which is able to release and to render the content to the user (cf document D1, page 10, lines 15 to 30).

16. The alleged improvements regarding security are speculative. For example, the statement that the operator of the remote system will be informed and can take immediate defensive action if the local system fails to obey the instructions not to release content (page 20, line 14 ff. of the application as filed), or the statement (page 19, lines 2 to 21) that sending or resending acknowledgement 377 (i.e. the third acknowledgement in terms of claim 1) makes it more difficult to disconnect or disrupt the communication, are not conclusive. Malicious attacks on the licensing process or its corruption in general are still possible since a malicious user may intercept this monitoring process and send faked acknowledgements. There are no countermeasures in claims 1 of the present requests which could clearly reduce the danger of such threats.

17. Since technical security is not an aspect which is actually relevant in the present case it is futile to analyse the invention under such aspects as threat, asset, and countermeasure, an approach applied in the decision under appeal. Although such an approach might be helpful in particular cases, in particular if the invention addresses the technical security of

information systems, it should be applied carefully since falling under the definition of a threat model does not automatically mean that the invention is excluded from patentability or *per se* not capable of providing an inventive contribution to the prior art.

In the present case, lack of inventive step in claims 1 of the main and the first and second auxiliary requests already follows from an analysis of the technical features and aspects of the claimed invention in the light of document D1.

Non-admission of the third and fourth auxiliary requests

18. The amendments to claims 1 according to the third and fourth auxiliary requests relate to the setting and modifying of a predefined time period provided that the first computer system sets through signals sent from the second computer system to the first computer system.

19. The appellant confirmed that the subject matter of these requests had been neither examined by the opposition division nor included in either one of the requests submitted with the statement of grounds. Neither did the appellant invoke any exceptional circumstances which could explain the late filing of these requests (after oral proceedings had been arranged).

20. Considering that the amendments were neither a response to any specific observations made by the Board nor to any new submissions by the respondent and further considering that the requests were not *prima facie* allowable, the Board has decided, pursuant to

Articles 12(4) and 13(1) RPBA, not to admit the third and fourth auxiliary requests to the proceedings.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

T. Buschek S. Wibergh