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# Datasheet for the decision of 24 January 2018

T 2101/12 - 3.5.06 Case Number:

Application Number: 08101403.7

Publication Number: 1970836

IPC: G06F21/24

Language of the proceedings: ΕN

#### Title of invention:

Method and system for providing an electronic signature

#### Applicant:

Vasco Data Security International GmbH

#### Headword:

Authentication binding document with signature/VASCO

### Relevant legal provisions:

EPC Art. 54(2), 56, 112(1)(a) RPBA Art. 20 Guidelines for examination G-VII, 2

### Keyword:

Inventive step - (no)

### Decisions cited:

T 0172/03, G 0003/08, T 0641/00, T 0154/04

### Catchword:

Article 54(2) EPC does not exclude non-technical disclosures from the prior art, in disagreement with Catchword 2 of T 172/03.



# Beschwerdekammern Boards of Appeal Chambres de recours

Boards of Appeal of the European Patent Office Richard-Reitzner-Allee 8 85540 Haar GERMANY Tel. +49 (0)89 2399-0 Fax +49 (0)89 2399-4465

Case Number: T 2101/12 - 3.5.06

DECISION
of Technical Board of Appeal 3.5.06
of 24 January 2018

Appellant: Vasco Data Security International GmbH

(Applicant) World-Wide Business Center Balz-Zimmermannstrasse 7

8152 Glattbrugg (CH)

Representative: Beck, Michaël Andries T.

IPLodge bvba

Technologielaan 9 3001 Heverlee (BE)

Decision under appeal: Decision of the Examining Division of the

European Patent Office posted on 12 April 2012

refusing European patent application No. 08101403.7 pursuant to Article 97(2) EPC.

### Composition of the Board:

Chairman W. Sekretaruk

Members: G. Zucka

M. Müller

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# Summary of Facts and Submissions

I. The appeal is against the decision by the examining division, dispatched with reasons on 12 April 2012, to refuse European patent application 08101403.7, on the basis that the subject-matter of independent claim 1 of the main and the two auxiliary requests was not new, Article 54 EPC, in the light of the following document:

D2 = US 2006/161 779 A1

II. A notice of appeal was received on 19 June 2012, the appeal fee being paid on the same day. A statement of grounds of appeal was received on 21 August 2012. The following document was additionally referred to in the appellant's reasoning:

D3 = WO 03/015370 A2

III. The present decision also makes reference to the following document, cited in the search report:

D1 = US 6 307 955 B1

- IV. The appellant requested that the decision under appeal be set aside and a patent granted on the basis of the claims of a main or two auxiliary requests filed with the grounds of appeal. The appellant made a conditional request for oral proceedings.
- V. The board issued a summons to oral proceedings. In an annex to the summons, the board set out its preliminary opinion on the appeal.
- VI. On 22 December 2017, the appellant filed claims for three additional auxiliary requests, labelled

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respectively "Auxiliary request III" to "Auxiliary request V". During the oral proceedings, the appellant substituted those requests, in their numerical order, for those that were filed with the grounds of appeal, and filed claims for an additional auxiliary request, labelled "Auxiliary request VI".

VII. The appellant requests that the decision under appeal be set aside and a patent be granted on the basis of claims 1 to 11 of one of auxiliary requests III to V, all filed on 22 December 2017, or on the basis of claims 1 to 9 of auxiliary request VI filed during the oral proceedings.

The further text on file is:

description pages
1 to 7 as originally filed;

drawing sheets
1 and 2 as originally filed.

VIII. Independent claim 1 of the auxiliary request VI reads as follows:

"A method for providing a document (30) with an electronic signature in a system (1) comprising a trusted party server (2), and a computer device (3) comprising a display (5) and being arranged for communication with the trusted party server (2) via a network (4),

characterized in that the system (1) further comprises a signature device (6) for producing the electronic signature and being configured for communication with the trusted party server (2),

and in that the trusted party server (2):

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- receives the document to be signed (32) from an author of the document (32); thereafter
- electronically authenticates (31) the document (30) received by providing it with a first authenticating sign (31), the authenticating sign (31) being a first PKI signature; thereafter displays the document to be signed (32) on the display (5) via the network (4) and the computer
- receives an electronic signature (9) produced by a signing party by means of the signature device (6); thereafter

device (3); thereafter

- provides the document sent (33) with the received electronic signature (9); and thereafter
- provides the document (33) provided with the electronic signature (9) with a second authenticating sign (34) for linking the document sent and the electronic signature together, the second authentication sign (34) being a second PKI signature."
- IX. Independent claim 1 of each of the higher ranking auxiliary requests III to V contains fewer features and has a broader scope than that of auxiliary request VI.
- X. The appellant further requests that the following questions be referred to the Enlarged Board of Appeal under Article 112(1)(a) EPC:
  - "1. In the assessment of the inventive step of subject matter presenting both technical and non-technical aspects, is it compatible with the holding in T 172/03 and the "COMVIK" approach to conduct a problem-solution analysis using a publicly known entirely non-technical practice as "closest prior art", notwithstanding the existence of technical teachings in the same field?

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- 2. If the first question is answered in the affirmative, does it make any difference whether there is a substantial body of prior technical teachings in the field, or only a small number of isolated publications?"
- XI. At the end of the oral proceedings, the chairman announced the board's decision.

#### Reasons for the Decision

1. The admissibility of the appeal

The appeal is admissible.

2. Admissibility of the new requests

The board admits newly filed auxiliary requests III to VI, since they clearly address the board's observations made in the summons and during the oral proceedings.

3. Summary of the invention

The invention is in the field of electronic signatures for documents (description page 1, first paragraph). An "electronic signature" is understood to comprise a "written expression, signature, text or one or more biometric characteristics of a signer, which is suitable for authenticating documents" (description page 2, lines 27 to 30). Electronic signatures may be subject to legal requirements (description page 1,

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third paragraph). It is also said that, up to the priority date of the application, electronic signatures were used only on a small scale, due to a lack of necessary infrastructure and lack of trust of parties in such signatures (description paragraph bridging pages 1 and 2).

The aim of the invention is to deal with the above issues. For this purpose the invention foresees that the document is shown from a trusted third party server arranged outside the scope of authority of the provider of the document, inspiring confidence with the signer(s) that the document cannot be subsequently manipulated. The link between the file of the document and the electronic signature is also created outside the parties' scope of authority, so that manipulation is not possible in that case either (description page 2, third full paragraph).

4. Interpretation of expressions used in the claims

The board considers it necessary to indicate how it interprets some of the expressions used in the claims.

4.1 Providing a document with an (electronic) signature

The board interprets this expression as "connecting in some manner a distinctive mark of a person or other entity with a document". The purpose/significance/ meaning of the distinctive mark or "signature" imposes no technical limitation on the claimed method/system. Indeed, it falls outside the scope of the claim and it is entirely up to the users of the system to agree how they will interpret the presence of a "signature" on said document.

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As far as the method/system is concerned, it makes no difference whether the signature is used to indicate approval with the content of the document, or alternatively to indicate that the "signatory" certifies for instance that a document was produced by a certain author, was not modified after a certain moment, or possesses some other characteristic which is relevant to the users of the system.

In this respect, even if, as pointed out by the appellant (grounds of appeal, page 5, second and third paragraph), there may be a significant difference for the parties concerned between "signing" and "certifying" a document, such difference does not a priori translate into a technical difference.

### 4.2 Trusted party server

Also the term "trusted party" imposes no technical limitation on the server. It is entirely up to the users of the system to agree whether a given server may be considered a "trusted (third) party".

### 5. Novelty; Article 54 EPC

5.1 In the appealed decision (Reasons, sections 7, 9 and 11), the subject-matter of claim 1 of all requests was considered to lack novelty in view of D2.

According to the appealed decision (*ibid.*, section 11), D2 discloses a method for providing a document with an electronic signature in a system comprising a trusted party server (TTP), and a computer device comprising a display and being arranged for communication with the TTP via a network, the system further comprising a signature device for producing the electronic signature

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and being configured for communication with the TTP, and in that the TTP:

- (1) receives the document to be signed from an author of the document; thereafter
- (2) displays the document to be signed on the display via the network and the computer device; thereafter
- (3) receives an electronic signature produced by a signing party by means of the signature device; thereafter
- (4) provides the document sent with the received electronic signature; and thereafter
- (5) provides the document provided with the electronic signature with an authenticating sign for linking the document sent and the electronic signature together.
- The board holds that, contrary to what is stated in the appealed decision, Reasons, section 12, D2 does not unambiguously disclose step (2) mentioned above, i.e. that the document is displayed before it is signed. Indeed, in the last sentence of said section 12, it is said that "signing something implies that the signer has seen it". Whilst the board agrees that this would be the usual situation, it points out that, for example when only the origin of a document needs to be certified, the certifier does not need to see the actual document but only needs to check its origin.
- 5.3 The board therefore holds that the subject-matter of claim 1 of all requests is novel; Article 54 EPC 1973.
- 6. Starting point for the assessment of inventive step
- 6.1 In the appealed decision, D2 was cited in a reasoning against novelty. One could therefore be led to believe that this document constitutes at least the most suitable starting point for the assessment of *inventive*

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step. The board is however of the opinion that such is not the case.

The board firstly points out that much of the disclosure of D2 is not straightforward, because of poor English language. The board understands that D2 discloses a system where information connected to a given document is stored in a database and, in encrypted form, in a 2D bar code (par. [0003]). The recipient of the printed document will scan the document with the bar code and decrypt the bar code. The information in the bar code, once decrypted, makes it possible to verify that the printed document is authentic (par. [0057] to [0065]).

The 2D barcode is generated by a member of a certification authority (par. [0004]). The system of D2 checks whether the member's signature is valid by comparing it with the member's stored signature (par. [0005]).

The board holds that D2 is not the most suitable starting point for the assessment of inventive step, for at least two reasons. Firstly, D2 does not unambiguously disclose that the document is displayed before it is signed (see above) Secondly, D2 does not unambiguously disclose that the document and the member's signature are somehow "linked together".

6.2 The board also does not consider the document mentioned by the appellant, *i.e.* D3, or other documents cited in the search report, to be more suitable starting points.

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- Instead, the board considers that the most suitable starting point is common general knowledge. The board considers it common general knowledge that documents, such as a will or a contract between parties, may be signed at a notary's office. The notary in such a case has the function of a "trusted third party". It is considered well known, and has not been denied by the appellant, that the whole process in the notary's office would typically comprise the following steps:
  - (a) A notary receives a document, which will need to be signed, from its author;
  - (b) the notary authenticates the document, e.g. by providing it with a seal;
  - (c) the notary presents ("displays") the document to a signatory (not necessarily, and indeed typically not, the same as the author), so that the signatory can gain knowledge of the document's content before signing it;
  - (d) the signatory signs the document;
  - (e) the notary authenticates the document together with the signature, *i.e.* the notary authenticates the fact that the given document was signed by the given signatory, linking the document and the signature together.
- The appellant has submitted, both in the response to the summons (under I.A.1(a)) and during the oral proceedings, that something can only be state of the art if it is related to a technological field or a field from which, because of its informational character, a skilled person would expect to derive technically relevant information, referring to T 172/03.

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6.5 According to the board, the wording of Article 54(2) EPC is clear and requires no interpretation:

"The state of the art shall be held to comprise everything made available to the public by means of a written or oral description, by use, or in any other way, before the date of filing of the European patent application" (emphasis added by the board).

Article 54(2) EPC itself contains no limitation according to which a non-technical process, such as the signing of a contract at the notary's office, may not be considered state of the art.

6.6 The board agrees with the appellant that this opinion is not in line with Catchword 2 of T 172/03 (as also relied upon in the Guidelines for Examination G-VII, 2), unless one interprets the expression "technically relevant" in that Catchword in a trivial manner. The board however considers that the interpretation of Article 54(2) EPC given in T 172/03 is incorrect.

In T 172/03, Reasons 9, it is said that a consistent construction of the patentability provisions "requires the term 'everything' in Article 54(2) EPC to be understood as concerning such kind of information which is relevant to some field of technology". According to the board, however, the legislator would have used a different term if such meaning had indeed been intended. A more appropriate expression would then for instance have been "all technical information". Instead, the wording of Article 54(2) EPC is unambiguous in that it contains an unqualified "everything", in all three languages ("alles" in German and "tout" in French).

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No provision in the EPC requires said term to be interpreted differently. In particular, the appearance of the terms "Stand der Technik" and "état de la technique" in respectively the German and the French version of Article 54(2) does not require it. It is precisely Article 54(2) which defines what should be understood as "state of the art", and because it is a definition one cannot first ignore the definition, by saying that the term "state of the art" should be interpreted in some sense, and only then start to read the definition in the light of that interpretation. This is however exactly what is done in T 172/03 Reasons 9.

As to the statement in T 172/03 Reasons 9 that it "can hardly be assumed that the EPC envisaged the notional person skilled in the (technological) art to take notice of everything, in all fields of human culture and regardless of its informational character", the board observes that there is in this respect no difference with "technical" prior art, i.e. a skilled person will not take notice of any prior art, regardless of whether it is technical, if it does not contain information that is useful to him or her as a skilled person. On the other hand, if some generally known information is useful, even if it should be designated "non-technical", there is no reason why the skilled person would ignore it.

6.7 The board further notes that the statement made in Catchword 2 of T 172/03 is not part of established jurisprudence. Most notably, this limited view on prior art has not been mentioned in the summary of the pertinent case law given in T 154/04 DUNS (see point 5 of the reasons), which G 3/08 has referred to for its

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summary of the case law (see point 10.7.1 and 10.13.1 of the reasons).

- 6.8 The board is consequently of the opinion that the process referred to under 6.3 above constitutes valid prior art under Article 54(2) EPC and may be used as the starting point in an inventive step analysis.
- 7. Inventive step; Article 56 EPC
- 7.1 The board holds that the subject-matter of claim 1 of auxiliary request VI is not inventive.
- 7.2 According to the appellant (Response to the summons, I.A,1(c)), the starting point chosen by the board for its inventive step analysis is a legal process and the skilled person would therefore try to end up with an improved legal process. From this reasoning it is apparent that the appellant considers the skilled person to be a legally skilled person. The board however considers that the human activity referred to under 6.3 above is well known and it sees no reason why a person skilled in the field of automation would not look at it from his or her own technical perspective.
- 7.3 The desire to automate human activities is a constant one. The board therefore deems it obvious that at some point the skilled person will want to automate said activity.
- 7.4 The board furthermore considers it obvious that a skilled person wishing to implement such automation will use commonly available tools for this purpose.
- 7.5 It will firstly be necessary to foresee a device that performs the function of the notary. In an automation

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context, this would typically be a computer (which may for instance be called "trusted (third) party server") that will be deemed trustworthy to the users of the system.

- 7.6 Another obvious automation measure, to be used instead of physical presence of the signatory at the notary's office, is the provision of a network that will connect a computer device used by the signatory to the trusted party server.
- 7.7 The skilled person further knows that the recording of a signature can be automated by means of dedicated "signature devices", such as disclosed e.g. in D1 (see abstract: "graphic tablet digitizer"). In order for the trusted party server to receive this signature, the signature device should be configured for communication with the trusted party server.
- 7.8 The technical equivalent of the human notary receiving the document from its author and authenticating it by providing it with a first authentication sign, will be that the trusted party server receives the document from its author and authenticates it electronically by providing it with a first authentication sign.

The board considers it obvious, in accordance with the established practice in the field of electronic authentication, to use a PKI (Public Key Infrastructure) signature for this purpose.

7.9 Just like a human notary shows to the signatory the document that needs to be signed, the "trusted party server" should display the document on a display that is part of the computer device used by the signatory, so that the latter can read it.

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- 7.10 The signatory will then use the signature device to sign for instance as an indication of agreement with the contents of the document.
- 7.11 The "trusted party server", acting as notary, will receive the electronic signature, provide the document with this signature, and provide the document provided with the electronic signature with a second authentication sign for linking the document sent and the electronic signature together, the second authentication sign, in accordance with the general practice in the field of electronic authentication, being a second PKI signature.
- 7.12 The skilled person will therefore, as a result of a straightforward automation of a known process, arrive at the subject-matter of claim 1 of auxiliary request VI without demonstrating any inventive activity. The subject-matter of that claim is consequently not inventive; Article 56 EPC.
- 7.13 Claim 1 of auxiliary requests III to V is broader than that of auxiliary request VI. The above argument concerning lack of inventive step therefore also applies to claim 1 of the other requests, the subjectmatter of which is consequently also not inventive;

  Article 56 EPC.
- 7.14 The appellant stressed during the oral proceedings that the presence of a notary is essential during the process and that a skilled person would therefore consider the use of a videoconference facility. The board observes firstly that the crucial notary tasks, i.e. identification of the signatory (which may be done by verifying its electronic signature) and witnessing

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the signing process are already carried out by the trusted party server. Secondly, the board points out that the wording of claim 1 does not exclude that the signing session be held in the context of a videoconference, with physical presence of the parties and a notary.

- 7.15 The appellant has objected (response to the summons, I.A.1(d)) that the approach used in "COMVIK" (T 641/00) should be applied to assess the inventive step of a claim containing a mix of technical and non-technical features. In the present case, however, the board holds that the skilled person starts from a prior art method with zero technical features, the problem which consists in the automation of that method being solved entirely with technical means. The question whether the board's approach deviates from that used in T 641/00 therefore does not arise.
- 7.16 According to the appellant (response to the summons, V.), the European Patent Office has the burden of proving the content of the common general knowledge it relies on, and for the present appeal the consequence should be that the case be remitted to the first instance in order to discuss inventive step in the light of such further evidence.

The board however observes that the appellant has at no moment disputed that the process mentioned under 6.3 above is indeed common general knowledge. The board further considers that the process as described above contains sufficient detail to allow the skilled person to arrive at the claimed subject-matter using otherwise nothing more than conventional automation techniques.

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The board therefore considers that no documentary evidence is required to prove the extent of the cited common general knowledge, let alone that it would be required to remit the case for a continuation of the inventive step discussion at the first instance in the light of such further evidence.

- 8. Possible referral to the Enlarged Board of Appeal under Article 112(1)(a) EPC
- 8.1 As is apparent from the above reasoning, the board has not identified any questions that would need to be answered by the Enlarged Board of Appeal, in order for the present board to be able to reach its decision.

In particular, the board answers the appellant's first question (see point X. above) in the negative. However, having given reasons for its deviation from Catchword 2 of T 172/03 (Article 20(1) RPBA, see point 6.6 above), the board need not refer the question to the Enlarged Board of Appeal. The appellant's second question depends on an affirmative answer to the first question and thus does not arise.

8.2 The appellant's request to refer said questions to the Enlarged Board of Appeal under Article 112(1)(a) EPC should therefore be refused.

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# Order

# For these reasons it is decided that:

- 1. The request for referral of 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