

**Internal distribution code:**

- (A)  Publication in OJ  
(B)  To Chairmen and Members  
(C)  To Chairmen  
(D)  No distribution

**Datasheet for the decision  
of 12 March 2012**

**Case Number:** T 1553/06 - 3.5.04

**Application Number:** 00200326.7

**Publication Number:** 1006733

**IPC:** H04N 9/16

**Language of the proceedings:** EN

**Title of invention:**

Display device

**Patentee:**

Koninklijke Philips Electronics N.V.

**Opponent:**

DSM IP Assets B.V.

**Headword:**

Public availability of documents on the World Wide Web/PHILIPS

**Relevant legal provisions:**

RPBA Art. 13(1)

**Relevant legal provisions (EPC 1973):**

EPC Art. 54(2), 99(1), 100(a)

EPC R. 55(a), 56(1)

**Keyword:**

"Admissibility of a contrived opposition test case (yes)"

"Novelty: the theoretical possibility of access to a means of disclosure is not sufficient for public availability; the practical possibility of having access, i.e. "direct and unambiguous access", is required"

"Novelty: public availability of a document stored on the World Wide Web and accessible only by guessing its URL"

"Novelty: public availability of a document stored on the World Wide Web and indexed in a public web search engine"

**Decisions cited:**

G 0002/88, G 0009/91, G 0010/91, G 0001/92, G 0009/93,  
G 0003/97, J 0020/85, T 0084/83, T 0328/87, T 0381/87,  
T 0444/88, T 0842/91, T 0472/92, T 0952/92, T 0301/94,  
T 0165/96, T 0314/99, T 1127/00, T 0055/01, T 0186/01,  
T 1081/01, T 1134/06, T 1875/06, T 1309/07, T 0002/09

**Headnote:**

1. An opposition filed within the framework of a test case is not inadmissible for that sole reason, provided that the prosecution of the proceedings thereby instituted is contentious because the parties defend mainly opposing positions. (See point 1.3)
2. The mere theoretical possibility of having access to a means of disclosure does not make it become available to the public within the meaning of Article 54(2) EPC 1973. What is required, rather, is a practical possibility of having access, i.e. "direct and unambiguous access" to the means of disclosure for at least one member of the public. (See point 6.5.4)
3. In the case of a document stored on the World Wide Web which can only be accessed by guessing a Uniform Resource Locator (URL) not made available to the public, "direct and unambiguous access" to the document is possible in exceptional cases only, i.e. where the URL is so straightforward, or so predictable, that it can readily be guessed. (See points 6.6 and 8.3)
4. The fact that a document stored on the World Wide Web could be found by entering keywords in a public web search engine before the priority or filing date of the patent or patent application is not always sufficient for reaching the conclusion that "direct and unambiguous access" to the document was possible.

Where all the conditions set out in the following test are met, it can be safely concluded that a document stored on the World Wide Web was made available to the public:

If, before the filing or priority date of the patent or patent application, a document stored on the World Wide Web and accessible via a specific URL

(1) could be found with the help of a public web search engine by using one or more keywords **all** related to the essence of the content of that document and

(2) remained accessible at that URL for a period of time long enough for a member of the public, i.e. someone under no obligation to keep the content of the document secret, to have direct and unambiguous access to the document, then the document was made available to the public in the sense of Article 54(2) EPC 1973.

If any of conditions (1) and (2) is not met, the above test does not permit to conclude whether or not the document in question was made available to the public.

(See point 6.7.3)



Case Number: T 1553/06 - 3.5.04

**D E C I S I O N**  
of the Technical Board of Appeal 3.5.04  
of 12 March 2012

**Appellant I:** Koninklijke Philips Electronics N.V.  
(Patent Proprietor) Groenewoudseweg 1  
5621 BA Eindhoven (NL)

**Representative:** Cohen, Julius Simon  
Philips  
Intellectual Property & Standards  
P.O. Box 220  
5600 AE Eindhoven (NL)

**Appellant II:** DSM IP Assets B.V.  
(Opponent) P.O. Box 9  
6160 MA Geleen (NL)

**Representative:** Mooij, Johannes Jacobus  
DSM Intellectual Property  
P.O. Box 9  
6160 MA Geleen (NL)

**Decision under appeal:** Interlocutory decision of the Opposition  
Division of the European Patent Office posted  
11 August 2006 concerning maintenance of  
European patent No. 1006733 in amended form.

**Composition of the Board:**

**Chairman:** F. Edlinger  
**Members:** B. Müller  
M. Paci  
C. Kunzelmann  
C. Vallet

## Summary of Facts and Submissions

I. Both parties have appealed against the opposition division's interlocutory decision dated 11 August 2006 maintaining European patent No. 1 006 733 as amended on the basis of a sole claim, which, according to the division, "contains in combination the features of granted claims 1 and 4". Mention of the grant of the patent was published on 16 October 2002. The patent comprising claims 1 to 4 originates from European patent application No. 00200326.7 filed on 1 February 2000 and published on 7 June 2000. The title of the invention is "Display device".

II. An opposition filed on 16 June 2003 was based on the grounds of lack of novelty and lack of inventive step (Article 100(a) EPC 1973). The opponent DSM IP Assets B.V. contended in particular that all granted claims 1 to 4 lacked novelty over Internet disclosures I1 to I4 corresponding in numbering (i.e. I1 to claim 1, etc.).

Documents labelled I1 to I4, as well as notarial records A1 and A2 pertaining to I1 and I2, respectively, were submitted together with the notice of opposition. The document named I4 included the content of I2 in identical fashion, together with a printout of pages 1 and 2 of the results of a search made with the "AltaVista" search engine. According to the opponent, this document I4 was furnished due to a mistake. The opponent only submitted the "correct" document I4 together with its statement of grounds of appeal. Details of the documents are provided below. New references (starting with the letter T), which the opponent provided in the oral proceedings before the

board for the sake of clarification (see table "NEW REF" attached to the minutes), are indicated in brackets. Originals of documents I1 (T10), I2 (T11 and T15) and I4 (T14), together with respective originals of notarial records, were submitted by the opponent in the oral proceedings before the board.

**I1** (T10)

Webpage entitled "Display Device" and dated 15-11-99 allegedly found at URL [http://www.gironet.nl/home/morozov/CIE/DISPLAY\\_DEVICE](http://www.gironet.nl/home/morozov/CIE/DISPLAY_DEVICE) on 15 November 1999 on the basis of the keyword string "CATHODE RAY TUBE and GRID and THREE ELECTRON BEAMS and PHOSPHOR" entered in the AltaVista search engine, as certified in a first notarial record **A1** dated 15 November 1999 at the request of DSM N.V. (DSM Patents & Trademarks).

**I2** (T11 and T15)

Webpage entitled "Display Device" including the content of document I1, to which a section entitled "Improved display device" was appended, allegedly found twice at URL [http://www.gironet.nl/home/morozov/CIE/DISPLAY\\_DEVICE](http://www.gironet.nl/home/morozov/CIE/DISPLAY_DEVICE):  
- a first time, on 12 January 2000, on the basis of the keyword string "THREE CATHODES and PHOSPHOR SCREEN and CONVERGENCE" entered in the AltaVista search engine as a webpage dated "12-1-00" (**T11**), as certified in a second notarial record **A2** dated 13 January 2000 at the request of DSM N.V. (DSM Patents & Trademarks),  
- and a second time, on 31 January 2000, on the basis of the keyword string that led to I1, likewise entered in the AltaVista search engine, as a webpage dated "31-1-00" (**T15**), as certified in a third notarial record dated

31 January 2000 at the request of DSM N.V. (DSM Patents & Trademarks); in the notice of opposition, this document was labelled **I4** (due to a mistake, according to the opponent) and is now referred to by the opponent as **T15**. A list of AltaVista search results and the aforementioned notarial record are also part of T15.

**I3** (T12 and T13)

- Enclosure 1 (**T12**): webpage entitled "Display Device (C)" and dated "31-1-00" allegedly found at URL [http://www.gironet.nl/home/morozov/CIE/THRESHOLD\\_115mV](http://www.gironet.nl/home/morozov/CIE/THRESHOLD_115mV) before the filing date of the patent. (Neither a keyword string nor a notarial record has been provided in respect of this webpage.)
- Enclosure 2 (**T13**): message including the sentence: "The resource requested */home/morozov/CIE/THRESHOLD\_150 mV*, cannot be found" and dated "31-1-00".

While all of the above-referenced documents were attached to the notice of opposition, the "correct" document I4, now referred to as T14 by the opponent, was supplied only with the opponent's statement of grounds of appeal. Details of that documents are as follows:

**I4** (T14)

- Enclosure 1: webpage entitled "Display Device (D)" and dated "31-1-00" allegedly found at URL [http://www.gironet.nl/home/morozov/CIE/THRESHOLD\\_250mV](http://www.gironet.nl/home/morozov/CIE/THRESHOLD_250mV) on 31 January 2000 at 9:30<sup>1</sup> on the basis of the keyword string "CATHODE and MODULATOR and INTEGRATED" in the Ilse search engine, as certified in a fourth notarial

---

<sup>1</sup> Terms of the form "X:YZ" refer to specifications of time all relating to MET (Middle European Time), also known as CET (Central European Time).

record dated 31 January 2000 at the request of DSM N.V. (DSM Patents & Trademarks),

- Enclosure 2: webpage dated "31-1-00" containing the message: "The resource requested */home/morozov/CIE/THRESHOLD\_250 mV*, cannot be found", allegedly found on 31 January 2000 at 9:40 while attempting to access the URL of Enclosure 1 of I4, as certified in said fourth notarial record,
- Ilse search overview dated "31-1-00" and
- Ilse search results dated "31-1-00".

The documents referred to as I1 and I2 above had already been relied on in a letter of 6 October 2000 by DSM N.V. (DSM Patents & Trademarks). That letter had been submitted within the framework of the proceedings up to grant as third-party observations under Article 115 EPC 1973. I1 had been furnished together with that letter, I2 subsequently, on 4 March 2002. Furthermore, in a letter of 10 October 2000, the **applicant** itself had indicated that the subject-matter of both claims 3 and 4 (corresponding to Enclosures 1 of I3 and I4, respectively) had been submitted to the Internet on 31 January 2000, between 9:20 and 9:40.

With letter of 11 March 2011, the opponent also filed non-patent documents O1 to O9 in support of its submissions.

- III. By decision of 11 August 2006 the opposition division held that the main request to maintain the patent as granted could not be allowed because the subject-matter of independent claim 1 lacked novelty over I1 and claims 2, 3 and 4 depended on this claim. I1 was considered to form part of the state of the art because



it could be freely accessed via the Internet and retrieved by means of a search engine. The division, however, allowed the (sole) auxiliary request consisting of the single claim 1 which contained a combination of the features of "granted claims 1 and 4". The patent was maintained accordingly (Article 102(3) EPC 1973). The division held that I4, the content of which was identical to that of I2, formed part of the state of the art. Neither I1 nor I4 nor any other of the available prior-art documents disclosed the additional feature of granted claim 4. The division did not decide on whether I2 and I3 belonged to the prior art as this was not relevant to the decision.

- IV. The board issued a communication pursuant to Article 15(1) of the Rules of Procedure of the Boards of Appeal (RPBA), annexed to a summons to oral proceedings dated 27 December 2010.

#### Admissibility of the opposition

The board raised the issue of admissibility of the opposition of its own motion. The board pointed out that the Enlarged Board of Appeal considered opposition proceedings to be contentious in nature. According to the Enlarged Board's ruling in case G 3/97 (OJ 1999, 245) an opposition was inadmissible if the involvement of the opponent was to be regarded as circumventing the law by abuse of process. Such a circumvention of the law arose, in particular, if the opponent was acting on behalf of the patent proprietor.

On the basis of a number of facts arising from the file, the board wondered whether the proprietor and the

opponent, possibly in conjunction with one or several other persons, e.g. one Mr. de Vries, professional representative before the EPO, had worked together at the request of the study committee for intellectual property of VNO/NCW (Confederation of Netherlands Industry and Employers) to create a test case regarding the question of whether and, if so, under which conditions, documents placed on the Internet constituted prior art within the meaning of Article 54(2) EPC 1973. In the affirmative, the board said that the contentious nature of the proceedings, being a condition for an opposition to be admissible, might be in doubt.

From certain facts relating to two e-mails C5 and C3 (originally labelled C7) by which the subject-matter of claims 5 and 7 of the application as filed had allegedly been communicated over the Internet, the board concluded that a possible (single) test case might originally have been intended to also encompass the question of whether e-mails transmitted via the Internet constituted prior art within the meaning of Article 54(2) EPC 1973. The subject-matter of claims 5 to 7 of the application as filed was subsequently excised from the application and further pursued in divisional application No. 02077838.7, later granted as European patent No. 1 263 240. This patent was opposed but the opposition was eventually rejected after opposition proceedings with the same parties and is now the subject of parallel appeal case T 2/09 pending before the present board.

#### Substance

The board considered it to be critical for the assessment of novelty and/or inventive step of the

subject-matter of the claims at issue to determine whether or not any of documents I1 (T10), I2 (T11 and T15), I3 (T12) and I4 (T14), allegedly all submitted to the Internet before the filing date of the patent, constituted prior art within the meaning of Article 54(2) EPC 1973. The board expressed the view that a document indexed in a public web search engine was, in principle, available to the public. Considering that I1 and at least the portion of I2 which was identical to I1 had been indexed, the board tended to acknowledge that I1 and I2 were publicly available before the filing date of the patent.

The board, on the other hand, expressed doubts that document I3 was made available to the public. In particular, no facts had been indicated, let alone evidence filed, as to how document I3 was allegedly found. Merely making a document available on the Web at a specific URL, without providing the URL to a web search engine, was not sufficient to consider the document to be publicly available if no information on that URL had been divulged to the public. Only if guessing the URL were easy, could the website then still be considered to be publicly available. The board had doubts that it was sufficiently easy to guess the URL of I3.

As for I4, the board raised the question whether this document could be admitted into the proceedings under Article 12(4) RPBA. The correct document I4 was submitted only in appeal proceedings even though, during opposition proceedings, the opposition division made it clear that what had been filed as evidence I4 had the

same content as I2 (see communication of 11 March 2005, paragraph 4.5).

- V. In the oral proceedings held before the board on 11 and 12 April 2011 (during which the parallel appeal case T 2/09 was also discussed) the parties made the following requests:

The opponent requested that the decision under appeal be set aside and that European patent No. 1 006 733 be revoked. In the event that the board considered the opposition not to be admissible, then the board was requested to refer the questions submitted in the oral proceedings to the Enlarged Board and to use its discretion to refund the appeal and opposition fees.

The patentee requested:

1. In the event that the board considers the opposition not to be admissible, then the board is requested to refer the questions submitted in the oral proceedings to the Enlarged Board and to use its discretion to refund the appeal and opposition fees.
2. That the decision under appeal be set aside and the patent maintained as granted (main request).
3. Alternatively, maintenance of the patent in amended form on the basis of claims 1 to 3 of the first auxiliary request filed with the statement of grounds of appeal.
4. Alternatively, maintenance of the patent in amended form on the basis of claims 1 and 2 of the second auxiliary request filed with the statement of grounds of appeal.

5. Alternatively, maintenance of the patent in amended form on the basis of claim 1 of the third auxiliary request filed with the statement of grounds of appeal.

6. Alternatively, that the opponent's appeal be dismissed and the patent be maintained in the form allowed by the opposition division.

The questions to the Enlarged Board submitted by each party are attached to the minutes of the oral proceedings.

At the end of the oral proceedings the chairman closed the debate and announced that a decision would be given in writing.

VI. The claims of the **main request**, as filed with the statement of grounds of appeal dated 19 December 2006, read as follows.

"1. A display device comprising

- a cathode system (3) including a grid (29) and three cathodes for emitting three separate electron beams (231,232,233), each cathode having an individual electron source (21,22,23),
- a phosphor screen (4) placed opposite the cathodes,
- an electro-magnetic deflection system (6) for scanning at least a part of the phosphor screen (4) with the electron beams (231,232,233) and arranged such that the electro-magnetic deflection system (6) converges the three electron beams (231,232,233) to a single moveable spot on the phosphor screen (4),
- a cathode modulator (5) having a signal input (50) for receiving an analogue electrical video signal and having an output for applying separate modulation voltages to

the respective electron sources (21,22,23) of the cathodes (3) relative to the grid (29), characterised in that

- the cathode modulator (5) is provided with three regulable analogue amplifiers (11,12,13),
- each regulable analogue amplifier (11,12,13) having a signal input for receiving the analogue electrical video signal,
- each regulable analogue amplifier (11,12,13) having a signal output for supplying one of said modulation voltages,
- each regulable analogue amplifier (11,12,13) having a control input, the amplification ratio of each regulable analogue amplifier being regulable on the basis of a regulating signal applied to the control input of said analogue amplifier (11,12,13) and in that
- the cathode modulator (5) is provided with an integrator circuit (17) having an input for receiving the analogue electrical video signal and having an output for supplying said three regulating signals, the integrator circuit (17) being arranged to derive an integrated video signal from the analogue electrical video signal and to derive the three regulating signals from the integrated video signal,
- the integrator circuit (17) having its output coupled to the respective control inputs of the three regulable analogue amplifiers (11,12,13) so as to apply the respective regulating signals to the respective control inputs of the individual regulable analogue amplifiers (11,12,13).

2. A display device as claimed in Claim 1, characterised in that

- the cathode modulator (5) is provided with three regulable voltage supplies (14,15,16), each regulable voltage supply being electrically connected to one of the electron sources (21,22,23) of one of the cathodes (3), each regulable voltage supply having a voltage control input, each regulable voltage supply (14,15,16) being arranged to supply a DC voltage having an adjustable voltage level, each of said voltage levels being dependent on respective voltage control signals applied to the respective voltage control inputs of said respective regulable voltage supply and in that,
- the cathode modulator is provided with a DC regulator (18) having an input electrically connected to the output of the integrator circuit (17) and having an output electrically connected to each individual regulable voltage supply (14,15,16),
- the DC regulator (18) being arranged to derive said three voltage control signals from the integrated video signal.

3. A display device as claimed in Claim 1 or 2, characterised in that

- the cathode modulator (5) is arranged to energise only one of the cathodes (3) provided the signal level of the integrated video signal is less than a predetermined threshold value.

4. A display device as claimed in any one of the preceding Claims, characterised in that

- the cathode modulator (5) is arranged to energise all three cathodes (3,21,22,23) provided that the signal

level of the integrated video signal exceeds a predetermined ceiling value."

Claim 1 according to the **first auxiliary request** corresponds to the combined features of claims 1 and 2 according to the main request. Claims 2 and 3 according to the first auxiliary request are dependent on claim 1.

Claim 1 according to the **second auxiliary request** corresponds to the combined features of claims 1 to 3 according to the main request. Claim 2 according to the second auxiliary request is dependent on claim 1.

Claim 1 according to the **third auxiliary request** corresponds to the combined features of claims 1 to 4 according to the main request.

VII. The arguments of the appellant/**patentee** are summarised as follows.

Arguments submitted in the statement of grounds of appeal or in the letter of 20 April 2007

*Required standard of evidence*

The opposition and the impugned decision relied on objections that could not be independently evaluated by other parties than the opponent. This required a very high standard of evidence ("up to the hilt"). However, in the decision under appeal, this high standard of evidence was not met.



*Claims 1 and 2*

The documents (now referred to as) I1 and I2, first submitted as evidence attached to observations under Article 115 EPC 1973, were not included in the prior art. These observations did not provide any information that the corresponding URL itself was published before the filing date of the patent application. Furthermore, only a limited part of the Internet was covered by the usual search engines: at least 40% of the information on the Internet was not retrievable. Consequently, the fact that I1 and I2 were mentioned in the observations under Article 115 EPC 1973 could only show that it was possible by chance to access the URLs involved.

Although information might be/might have been *accessible* on the Internet, this did not imply in itself that the information was actually *available* to the public. The term *accessible information* referred to information for which there was merely no legal or technical obstruction preventing the information from being revealed to, or found by, the skilled person. The term *available information* referred to information which the skilled person had at his disposal and for which he did not have to resort to artificial measures or undue burden to find out. In order to elaborate on this distinction a few examples were presented (see the following purported analogies):

- Accessible, but not available, information was, for example, *encrypted* or *password-protected* information. Another example was information that was accessible for a *time period* that was less than was necessary for the skilled person to acquire the information.

- Furthermore, submission of information to the Internet could be considered analogous to sending the information to an (albeit electronic) *in-tray*. There was no indication that the information had been delivered to an arbitrary member of the public at large. Nor was there any indication that the information on the Internet (i.e. the content of I1 and I2), and the circumstances under which it was present there, would have been identifiable by an arbitrary member of the public prior to the filing date of the patent in suit. Following the reasoning of the Board of Appeal in T 381/87 (OJ 1990, 213) where an arbitrary member of the public was in a position to request to see a particular identifiable document from a library, it had to be concluded that submissions to the Internet should not be considered as included in the state of the art.

- Moreover, also by analogy, submission of information to the Internet should be regarded as permitting said information to be published, but not as an actual publication. This *permission to publish* could not in itself amount to making the information available until it was actually delivered to a member of the public. Mere permission to publish did not make the information become publicly available (citing T 842/91).

- In order to reveal the content of documents I1 and I2 one needed to expose the Internet to a very particular interaction, viz. in the form of submitting either a very special set of keywords to a web search engine or a particular character string as the URL of the webpage. This was analogous to the *exposure of a product to a deliberately chosen specific external condition* which

revealed particular properties of the product. In such a situation this information (those properties) was considered in Opinion G 1/92 (OJ 1993, 277) of the Enlarged Board of Appeal not to be available to the public. In this Opinion the Enlarged Board further stated that the requirement "made available to the public" was only satisfied provided that there was direct and unambiguous access to the particular information. In the present case, it would constitute undue burden to perform an analysis of the Internet under specifically chosen circumstances in order to derive the features of the claims of the patent.

Hence the subject-matter of claim 1 of the opposed patent was novel and inventive.

*In particular claim 2*

As to claim 2 of the patent, the documents produced by the opponent indicated that the Internet disclosure I2 could only be found by entering a very specific set of keywords, namely exactly the set of keywords that led the opponent to Internet disclosure I1. Apparently, the Internet disclosure was updated sometime between 15 November 1999 and 12 January "2001" and it was only by mere chance that the opponent had been able to access the updated information (i.e. the information in I2 not present in I1) at the URL shared by I1 and I2.

In fact, the particular set of keywords to be entered in the search engine was the equivalent of a password. Correctly guessing the keywords involved an undue burden for the skilled person. Moreover, the skilled person setting out to improve the display system mentioned in

I1 would use keywords different from the ones which led the opponent to I1. The skilled person would try to employ keywords like "better convergence". However, the notarial record A2 indicated that such keywords did not lead the skilled person to I2 or to any information which disclosed the features of claim 2 of the patent.

Hence, the subject-matter of claim 2 of the opposed patent was novel and inventive.

### *Claim 3*

In its letter of 10 October 2000 the then applicant informed the examining division that parts of the application had been submitted to the Internet. More specifically, the subject-matter of claim 3 had been submitted to the Internet on 31 January 2000, i.e. one day before the filing date of the application. This Internet disclosure is now referred to as I3. I3 was not indexed by any search engine. In this context the term "indexing" related to providing keywords of the information submitted to the Internet to one or several search engines.

Furthermore, I3 was only present on the Internet for a very brief period of time, i.e. from 9:20 until 9:40 on January 31, 2000. There had been no prior announcement that I3 would be put on the Internet. It was thus quite improbable that any search engine would have discovered I3 before the filing date during this brief period of time of 20 minutes. It was even more improbable that any member of the public could have accessed I3 during this period of time by directly entering the URL of I3 into a web browser. Indeed, the

URL of I3 had not been made public before the filing date. Accordingly, the URL itself effectively provided password protection preventing access to I3. Correctly guessing the URL involved an undue burden for the skilled person. These restrictions resulted in the content of I3 being accessible but not available. Thus, (even) on the balance of all probabilities, I3 was not available to the public before the filing date of the patent.

Hence the subject-matter of claim 3 of the opposed patent was novel and inventive.

*Claim 4*

As indicated in the then applicant's letter of 10 October 2000, the subject-matter of claim 4 of the application as filed (indicated as I4) was submitted to the Internet on the day before the filing date and was removed therefrom shortly after its submission. Although I4 was indexed in that a set of keywords, viz. "cathode", "modulator" and "integrated", was provided to two search engines (AltaVista, Ilse), the actual submission I4 was only accessible for a brief period of time. I4 was submitted to the Internet at around 9:20, found by the Ilse search engine at 9:30 and no longer retrievable at 9:40. There had been no announcement that I4 would be submitted to the Internet.

*Defensive and hidden publications*

Should the board decide that there was hardly any or no distinction between available disclosures and accessible disclosures, then a wide discrepancy would occur between

what was comprised in the state of the art pursuant to Article 54 EPC 1973 and what was actually available to the public in practice. Such a wide discrepancy might render the European patent system vulnerable to inappropriate use. For example:

(i) So-called defensive publications might be created which were, in fact, only known to their authors. Such a publication might be used as a novelty-destroying prior-art disclosure against a later-filed European patent (application) even though the later applicant had at best only an academic possibility of gaining knowledge of the existence of such a defensive publication.

(ii) "Hidden" publications known in actual fact only to an applicant of a European patent application might be generated on the filing date. Such a hidden publication might be later, at the author/applicant's sole discretion, unveiled as constituting "full prior art" pursuant to Article 54(2) EPC 1973 while the public, the subsequent applicant and examiners of the EPO had until then only been aware of the existence of the earlier European patent application forming merely a prior right under Article 54(3) EPC 1973 for the same subject-matter.

Arguments submitted in the letter of 11 March 2011 (i.e. after the board's communication setting out its provisional opinion)

*Admissibility of the opposition*

Regarding admissibility of the opposition in respect of the issue of the contentious nature of the proceedings, the patentee replied:

The Board of Appeal has **correctly reconstructed** that in the present case there has been a **substantial level of co-operation between the parties and other professional representatives**. The purpose of the present patents

(parent and divisional) was and is to assess if and to what extent disclosures via the Internet would fall under the prior art as defined in Art. 54 EPC.

...

Apart from this co-operation, however, there is no hierarchical relationship between the parties, nor has there been a hierarchical relationship between the parties and VNO-NCW. Notably, the opponent has not acted on behalf of the patent proprietor, but has been in contact with the patent proprietor in relation to the aim of establishing the status of disclosures via the Internet. The present opposition proceedings are contentious in that both sides have argued opposite views on the question at issue.

(quoted from the patentee's letter, page 1, second paragraph, and page 2, second paragraph, respectively, emphasis added)

#### *Substance*

As to the criterion mentioned in the board's communication and based on whether a document on the World Wide Web was indexed by a public web search engine, it was not clear at what point in time this would need to be established. It was well-known that both the Internet and the algorithms of search engines kept evolving. The presently reputable search engine Google did not even exist at the filing date and the capabilities of search engines also developed as time progressed. The question therefore arose whether an opponent would need to establish within the time limit for opposition (Article 99(1) EPC) that the document at issue had been indexed already at the priority or filing date of the patent.

Instead of the board's test, the introduction of an objective test was proposed to establish whether a publication on the Internet was available to the public.

According to this test, a typical Internet user would start by typing either a known URL or by using a public search engine. The objective test should notably not be critical on the set of keywords used to identify the document in point. Moreover, the objective test should to a large degree reflect the actual situation at the priority (or filing) date of the (opposed) patent. Should the test be applied later than within the time limit for opposition, it would become less likely that successful retrieval by a public search engine at that point in time represented the situation at the priority (or filing) date. For documents I2 and I3 it would appear that such a test would not place these documents within the state of the art (Article 54(2) EPC 1973).

Where a publication was available on the Internet only via a URL which was not publicly known and which was not indexed in a search engine, guessing the URL would place an undue burden on the user. Indeed, the publication not being indexed in a search engine would be comparable to a non-indexed diploma thesis in a library, which was deemed not to be publicly available (T 314/99). The chance of correctly guessing a URL, which might presently comprise up to 2048 characters when using the most common Internet browser (Internet Explorer) and much more when using other browsers, had to be regarded as infinitesimally small. Consequently, guessing a URL was practically impossible, especially within a limited time frame.

As to the issue of "defensive" or "hidden" publications, in conventional publications such "hidden" disclosures were rather an exception such as, for example, a technical disclosure in a minor small-ads newspaper



having a very limited circulation (T 165/96). On the other hand, such hidden disclosures via the Internet might not be exceptional because of the very low difficulty threshold of submitting documents to the Web. For instance, in the case of document I3, if it were decided that I3 should be regarded as publicly available, such a decision would provide a means of "hidden" defensive publishing of documents.

#### Arguments submitted during the oral proceedings

The opponent found documents I1 to I4 because its representative, like the patentee's representative, was part of a test case project. That project sought to determine if and under which conditions documents submitted to the Internet and e-mails transmitted via the Internet constituted prior art. There was no evidence that anyone else could have found the documents. The opponent was bound by confidentiality flowing from a non-disclosure agreement (NDA). That NDA covered the application as a whole and was valid until the publication of the patent application.

Document I3 was not indexed. The time span of 20 minutes was too short for a web crawler to find I3. In any case the patentee could not verify whether a web crawler had nevertheless found it. In order to find I3 it would have been necessary to guess the whole character string of the URL of I3 ending with "THRESHOLD\_115 mV/", which was far too difficult.

Whether a document was available on the Web should be determined on a case-by-case basis. The exactness of the keywords should not be critical, but there should be a

set of keywords leading to the document in question taking into account the technical field and the skilled person.

The patentee has not disputed that I1 and I2 could be accessed on the basis of keywords. It was not so difficult to find I1, the keywords used having been suitable for retrieving that document from the Web.

VIII. The arguments of the appellant/**opponent** are summarised as follows.

Arguments submitted in the statement of grounds of appeal

Claim 1 of the patent as maintained, combining the features of claims 1 and 4 as granted, lacked novelty over I4. I4 was indexed and published on the Web on 31 January 2000 between 9:20 and 9:40. In the decision under appeal this claim was considered novel because the document I4 submitted with the notice of opposition did not disclose the features of granted claim 4. However, that document I4 was supplied by the opponent by mistake. The correct I4 should be the admission of the then applicant in its letter of 10 October 2000 that the subject-matter of claim 4 was submitted to the Internet between 9:20 and 9:40. The applicant further stated in that letter that I4 was indexed by the search machine [www.ilse.nl](http://www.ilse.nl) and was retraceable by entering a set of keywords, viz. "cathode", "modulator" and "integrated". In any case, a correct copy of I4 was supplied by the opponent with the statement of grounds of appeal. Although this publication, according to the patentee, was available for 20 minutes only, there was no requirement in Article 54(2) EPC 1973 for a minimum

period during which subject-matter had to be made available to the public. Claim 1 therefore lacked novelty over Internet publication I4.

Arguments submitted in the letter of 11 March 2011 (i.e. after the board's communication setting out its provisional opinion)

*Admissibility of the opposition*

The opposition was admissible for the following reasons:

- that oppositions were "contentious proceedings" was not a general principle,
- the parties satisfied the criteria for "contentious proceedings",
- VNO-NCW (the Confederation of Netherlands Industry and Employers) did not control either party,
- co-operation between parties' representatives did not make proceedings non-contentious,
- there would be undesirable consequences from a ruling of inadmissibility.

More specifically, as stated in the paragraph bridging pages 6 and 7 of the opponent's letter of 11 March 2011 (emphasis added):

Various representatives of the Parties have on multiple occasions ... discussed this case with officials at the EPO to explain that this is a test case that arose out of informal discussion in the forum of "Studiecommissie Intellectueel Eigendom van VNO/NCW" [study committee for intellectual property of VNO/NCW]. **The facts set out by TBA** [the present technical board of appeal] **in the Remarks** [the communication annexed to the summons] **are admitted** by the Appellant and there has never been any intend [sic] to deceive the EPO. The conduct of the Parties and their professional representatives shows there has neither been abuse nor any intent to circumvent the law.

*Issues of proof*

The opponent pointed out that

- one should not discriminate against a particular disclosure merely because of the form in which it was made, i.e. written documents in electronic form (whether on the Internet or as e-mail) had to be assessed in the same manner as analogous printed paper documents;
- for publication it was sufficient that someone *could* have read the content of a document, not that someone *did* actually read it (citing T 381/87, OJ 1990, 213);
- as for the standard of proof, earlier decisions of the boards of appeal were wrong to treat Internet disclosures like a prior use. Web and e-mail disclosures were potentially available to all and thus should be treated in evidence the same way as (allegedly) published paper documents would be. Accordingly, the "balance of probabilities" standard should be applied to all written documents irrespective of the form in which they were published (paper, Internet, or e-mail). Any concern about the reliability of Internet or e-mail evidence should impact on the weight attached to a particular document and should not affect the threshold of standard of proof. The decisions in cases T 1134/06 and T 1875/06 could be distinguished on their facts. In the alternative, insofar as they suggested that the "up to the hilt" test should be applied to all Internet disclosures, they were incorrect.

*Documents I1 to I4 made available to the public*

As to Article 54(2) EPC 1973 and 2000, both provisions required at least two elements: (a) "*made available*" and (b) "*to the public*".

(a) "Made available"

*Keywords: search strategy as password*

The patentee argued that the combination of keywords was hidden from a skilled person and thus was akin to a password. This might be true for very obscure or complex searches. However, in the present case, the search strategies used to find the documents submitted were reasonable for a skilled person to attempt at the filing date. They used common keywords in the field known to any skilled person interested in displays.

Whether search terms were readily reproducible by someone else depended also on the relevant skilled person/team and their collective level of IT skills. This level would be high for researchers working in a technical environment who had the support of searchers and IT departments, as in the present case.

In the present case the keywords used for the two searches were:

S1 - Cathode AND modulator AND integrated (in Ilse)

S2 - cathode ray tube AND grid AND three electron beams AND phosphor (in AltaVista).

Neither strategy used unusual keywords requiring advanced or detailed knowledge of the results which were found. This type of display device was already known generically at the filing date from US 5712538 A (corresponding to WO 96/19899 A2 mentioned in the international search report), as the patentee admitted. Moreover, a skilled person in the field of displays was

aware of these technical terms and was free to use them in a search.

*URL: Uploading to server at a defined URL*

The question arose as to whether the existence of a URL also "made available" documents located at this URL. One might argue that because a person who guessed a URL or randomly typed the correct address into his browser would access the document at that location, as soon as the document was uploaded to any "URL", it was also "made available". Alternatively, one could argue that if it could not be found via a search engine that URL was "effectively hidden".

The patentee expressed the concern that too lenient a burden of proof might lead to an increase in Internet disclosures which, while being deemed public, would be effectively hidden as they could never be found in practice, except by the person who put them there (hereinafter also referred to as "the discloser").

To this, the opponent countered that the **intent** of the person who uploaded the document should be taken into account. In other words, it should be considered whether the person truly intended to make the document available to the public. Thus, although the test was still that someone "could" have read the content of the document, not that someone "did", if the discloser was attempting to make the likelihood of "could" as small as possible so that no one "did" see its content, then the conclusion should be that no publication had occurred as it was likely no one "could" have read the content of the document and, arguably, also because there was an

intent to deceive. In the special case where a disclosure was deliberately placed on the Web but later removed, such a removal might also be seen as an admission that the disclosure was public (else why remove?). Indeed, such a removal should not help the remover if the disclosure was deliberate but done by mistake (e.g. done by an inventor unaware of patent law), because, at the time it was uploaded to the Web, the document was still intended to be found.

Furthermore, there was a difference between an Internet disclosure which was made at an unknown location, such as a random URL which had yet to be properly linked to the wider Web (e.g. manually uploaded to a search engine index or automatically indexed by a web crawler), and one easily found by a search engine. In the latter case, an intent to "hide" the URL might still play a role in determining whether the content of the URL "could" really have been found. But in such a case, it would be for the person impugning the plain meaning of "available" to show that, for technical and other reasons, the document at said URL was not truly "made available".

In contrast thereto, when a document was located at a recognised place (such as a library as in T 381/87 or a busy server through which e-mails passed in transit), it should be assumed that the document could be accessed by other people (librarians/administrators) who would be looking for such documents because of the nature of these locations. In such a case, there would be no expectation of confidentiality when a person sent (or permitted others to send) a document to one of these places.

A document located at a URL which was readily guessable (such as [www.dsm.com/home.htm](http://www.dsm.com/home.htm)) could be considered to be more like a document located at a library where, given the nature of the location, there was an expectation that someone could find it. In such a case, the document could be considered "made available" immediately on upload, regardless of whether it had yet been indexed by a search engine or whether it had been uploaded for a short time only (unless the time was so short, e.g. a few seconds, that the URL could not be entered and the document found in the time window available). Simple URLs should be assumed public with the burden of proof shifting to a person alleging non-publication.

In conclusion, the more obstacles were placed to complicate the finding of the URL, the more the burden shifted to the discloser to show that the URL could nevertheless have been found.

*Reproducibility of the search*

In the opponent's view, on the balance of probabilities, the searches used to retrieve I1 to I4 were reproducible at the filing date in such a way that any other person could have retrieved each of these documents.

A potential problem with the generic test proposed by the board was that search engine abilities changed over time (in the communication annexed to the summons the board provisionally suggested that a document indexed in a public web search engine was, in principle, available to the public; see page 16, third paragraph). A search conducted after the priority or filing date (even on an



Internet archive site) might not find the same documents as the same search performed by the same engine but performed before that date. After the priority or filing date, different or later versions of search engines might be used that were not available before that date, while the earlier versions of the search engines might no longer be available. It would thus be reasonable to limit such searches to search engine technology available within a given time period after the priority of filing date (perhaps up to the end of the opposition period). However, the longer the time period since the priority or filing date, the more evidence would be required to show that the found documents would also have been found by older search engines.

*Applying the above principles to present facts for I1 to I4*

In the present case documents I1 to I4 were "made available" to the notary public as he had attested so. Also both searches evidenced in documents I2 and I4 were performed by a search engine before the filing date of the patent. Thus it was known that both these search algorithms were available for use before the filing date.

It might be unlikely that any of disclosures I1 to I4 still existed on the Internet, but the notarised documents were clear: the notary was in possession of all these documents, found these on the Web, and there was no suggestion from the documents that they were to be considered confidential per se. Hence they had been "made available" to him.

While these URLs were not simple, they were located on a known Internet service provider (though no longer active). So they could also be guessed with some basic IT skills and a few attempts.

For some documents (e.g. I2) there was clear evidence that they were found by a search engine and were thus "made available". For another document (I4) there was evidence that one search engine did not find it at one point in time. However, this was not evidence that the document was not available by another means, such as by a different search engine. Moreover, there was no evidence from the proprietor to explain the significance of the "time period of 40 [sic] minutes".

"Availability" could therefore be assumed for each of documents I1 to I4 on the balance of probabilities.

(b) "To the public"

The second question to be answered was whether the notary public who found the Internet documents "I1 to I4" could be regarded as a member of "the public" as meant in Article 54(2).

*Obligations of the notary who performed the search*

Although it might be argued that the notary was not a member of "the public", it would be up to the proprietor to prove it. In the absence of any such evidence, one could assume the notary was a member of the public.

*Skilled person could repeat searches*

Even assuming that the board decided on the balance of probabilities that the notary was not "the public" this would not help the patentee because the notarial records were also evidence that anyone, in particular a skilled person, could have performed the same searches as the notary before the filing date and thus could have found I1 to I4.

Moreover, there was nothing in documents I1 to I4 per se to suggest to a person finding and reading them that their content should be kept confidential. Thus even a person who found them accidentally would not assume an obligation to keep them secret.

Arguments submitted during the oral proceedings

During the oral proceedings before the board the opponent clarified that, contrary to what it had alleged for the first time in its letter of 11 March 2011, document I3 comprising enclosures 1 and 2 (i.e. T12 and T13) was **not** notarised. The document referred to in that letter was in reality the "wrong" I4, identical to I2, now identified as T15. As to T12, by analogy to previous documents, it was quite likely that it was found by using keywords. Whether this could be proven "up to the hilt" might be an open question, but that was not the right approach. Given that there existed some very different search engines, even if T12 was not indexed in one of them, one did not need to assume it was not indexed in another one. A time period of 20 minutes was sufficient for a web crawler to find T12. On the balance

of probabilities, I3 must have been accessible by at least one search engine.

## Reasons for the Decision

### 1. Admissibility of the opposition

#### 1.1 The case law of the Enlarged Board of Appeal

At the outset, the board recalls that an opposition may be found inadmissible under Rule 56(1) EPC 1973 (Rule 77(1) EPC) at any stage of the proceedings including appeal proceedings (see e.g. T 328/87, OJ 1992, 701, point 4 of the Reasons).

For the board it follows from the decisions of the Enlarged Board of Appeal delivered in cases G 9/93 (OJ 1994, 891) and G 3/97 (OJ 1999, 245) that it is a condition for an opposition to be admissible that the opposition proceedings thereby instituted are **contentious**.

In G 9/93 (point 1 of the Reasons) the Enlarged Board said:

... [I]n G 9/91 and G 10/91 ... the Enlarged Board held that in view of their special post-grant character, opposition proceedings under the EPC are in principle to be considered as **contentious** proceedings between parties normally representing opposing interests. (Emphasis added)

Against this backdrop the Enlarged Board judged that:

the patent proprietor is not covered by the term "any person" in Article 99(1) EPC [1973] and is therefore not entitled to oppose his own patent under that provision. (See *ibid.*, at point 3 *in fine*)

The Enlarged Board's ruling in G 3/97 dealt, *inter alia*, with the question of whether an opposition filed by an indirect representative ("straw man") was admissible.

The Enlarged Board decided (see the Order) that:

1(a): An opposition is not inadmissible purely because the person named as opponent according to Rule 55(a) EPC [1973] is acting on behalf of a third party.

1(b): Such an opposition is, however, inadmissible if the involvement of the opponent is to be regarded as circumventing the law by **abuse of process**.

1(c): Such a circumvention of the law arises, in particular, if:

- the opponent is acting on behalf of the patent proprietor ...

(Emphasis added)

Under point 4.1 of G 3/97 the Enlarged Board explained in this respect that:

Attention has already been drawn to the decision in G 9/93 ... Here, it was decided that the patent proprietor is not entitled to oppose his own patent, since opposition proceedings are **contentious** and the opponent must therefore be a person other than the patent proprietor. This in itself requires no further comment. However, if the patent proprietor employs a straw man, then the latter, too, is representing the patent proprietor's interests. The identification of the straw man as opponent according to Rule 55(a) EPC [1973] does nothing to alter the fact that the person who is formally a party to the proceedings is on the patent proprietor's side. From this it follows that in this situation, too, the proceedings are not **contentious**. The employment of the straw man merely serves to conceal this circumstance and to circumvent the legal consequences arising from it. The action of the opponent on behalf of the patent proprietor therefore renders the opposition inadmissible. (Emphases added)

The present board cited the above references to the case law of the Enlarged Board in its communication annexed to the summons to oral proceedings. It would add what the Enlarged Board said in G 3/97 on proof-related issues (see point 5 of the Reasons):

The burden of proof for a straw man objection is to be borne by the person raising the issue, ie the patent proprietor or, in the case of an objection by the Office of its own motion, the relevant EPO department.

Regarding the standard to be applied in assessing evidence, it must be remembered that any person is entitled to file an opposition. Withholding this legal entitlement from anyone requires a particular justification, which cannot be based on a mere balance of probabilities. Instead, before considering an opposition to be inadmissible, the deciding body has to be satisfied, on the basis of clear and convincing evidence, that the law has indeed been circumvented in an abusive manner by the employment of a straw man.

## 1.2 The opponent's assertions

In its reply of 11 March 2011 to the board's communication, the opponent relied on the following arguments to establish the admissibility of the opposition (see section 1 of the reply):

- that oppositions were "contentious proceedings" was not a general principle,
- the parties satisfied the criteria for "contentious proceedings",
- VNO-NCW (the Confederation of Netherlands Industry and Employers) did not control either party,
- co-operation between parties' representatives did not make proceedings non-contentious,
- there would be undesirable consequences from a ruling of inadmissibility.

## 1.3 Analysis

On the basis of the parties' submissions, the board cannot find a circumvention of the law by abuse of process in the sense mentioned above, i.e. because the opponent acted on behalf of the patent proprietor.

In their submissions in reply to the board's communication annexed to the summons, both in writing and in the oral proceedings before the board, the parties admitted that they co-operated on a test case that arose out of a discussion in the study committee for intellectual property of VNO-NCW. It was only by these submissions that the parties informed the board of the test case. They may have conveyed pertinent information to the first instance as long ago as in 1998, as they contend. Yet the board, in its preparation of the file for the oral proceedings, which is reflected in the communication annexed to the summons, found no hint of the parties having provided express information to the EPO that this was a test case. Rather, as follows from the facts enumerated in said communication, under the section dealing with the admissibility of the opposition, the opposite would have to be concluded from the file as it stood at that time.

As for the prosecution of the test case, the parties agreed that the opponent was not bound by any instructions from either the patentee or the study committee. The board has no reason to cast doubt on these submissions. The fact that a test case was created does not necessarily imply that the various submissions made as part of it must have been under the control of one party (or of both parties jointly).

A further question is whether the opposition proceedings are not contentious because of the very fact that the parties defended their positions within the framework of a test case in order to obtain answers from the board to specific legal questions, i.e. whether and under what

conditions disclosures via the Internet constitute prior art within the meaning of Article 54 EPC 1973.

The board is of the opinion that the prosecution of the opposition proceedings was contentious, as required by G 3/97, because the parties defended mainly opposing positions. The fact that the parties defended their positions within the framework of a test case and will obtain answers from the board to certain specific legal questions is immaterial in this regard. Therefore the opponent's challenge to the soundness of the requirement of contentious proceedings established in G 3/97 need not be afforded any consideration.

From the above analysis the board concludes that the opposition is admissible. As a consequence, the parties' questions to the Enlarged Board are moot.

2. Overview of the various substantive requests

The patentee's requests 2 to 5 refer to the main and first to third auxiliary requests, in that order, filed with the statement of grounds of appeal. In that statement, the patentee indicated that the main request (current request 2) was to maintain the patent as granted and referred to the three auxiliary requests (current requests 3 to 5) as indicated in the summary below. The board notes that the claims of the main request differ slightly from the claims as granted, essentially in that, in claim 1, the word "same" in the portion "for receiving the same analogue electrical video signal" in the second indent of the characterising portion has been omitted. The same applies to claim 1 of each of the first to fourth auxiliary requests (current



requests 3 to 6). The board thus considers that the patentee's request to maintain the patent as granted (current request 2) is effectively a request to maintain the patent in amended form on the basis of the claims of the main request filed with the statement of grounds of appeal. For the sake of simplicity, the board will nevertheless use the term "as granted" in quotation marks in the summary below, which should be understood with the aforementioned proviso.

For the sake of clarity, in the following the board will refer to the patentee's substantive requests, i.e. current requests 2 to 6, as "main request", "first auxiliary request", "second auxiliary request", "third auxiliary request" and "fourth auxiliary request", respectively.

*Main request*

Independent claim:

- claim 1 "as granted" filed with the statement of grounds of appeal.

Alleged relevant prior art:

- I1 disclosing in combination all the features of claim 1 "as granted", and
- I2 which includes the content of I1 and, also, discloses all the additional features of claim 2 "as granted".

*First auxiliary request*

Independent claim:

- claim 1 consisting of the combination of the subject-matter of claims 1 and 2 "as granted".

Alleged relevant prior art:

- I1 disclosing in combination all the features of claim 1 "as granted", and
- I2 which includes the content of I1 and, also, discloses all the additional features of claim 2 "as granted".

*Second auxiliary request*

Independent claim:

- claim 1 consisting of the combination of the subject-matter of claims 1, 2 and 3 "as granted".

Alleged relevant prior art:

- I1 disclosing in combination all the features of claim 1 "as granted",
- I2 which includes the content of I1 and, also, discloses all the additional features of claim 2 "as granted",
- I3 (T12) disclosing the additional feature of claim 3 "as granted", and
- I4 disclosing all the additional features of claim 4 "as granted".

*Third auxiliary request*

Independent claim:

- claim 1 consisting of the combination of the subject-matter of claims 1, 2, 3 and 4 "as granted".

Alleged relevant prior art:

- I1 disclosing in combination all the features of claim 1 "as granted",
- I2 which includes the content of I1 and, also, discloses all the additional features of claim 2 "as granted",
- I3 (T12) disclosing the additional feature of claim 3 "as granted", and
- I4 (T14) disclosing the additional feature of claim 4 "as granted".

*Fourth auxiliary request*

Independent claim:

- claim 1 consisting of the combination of the subject-matter of claims 1 and 4 "as granted".

Alleged relevant prior art:

- I1 disclosing in combination all the features of claim 1 "as granted",
- I2 which includes the content of I1 and, also, discloses all the additional features of claim 2 "as granted", and
- I4 (T14) disclosing the additional feature of claim 4 "as granted".

3. Added subject-matter

The fact that the term "same" was omitted in claim 1 according to the main request and the first to fourth auxiliary requests is immaterial as it follows from the fourth indent that the claim as granted involves only one analogue electrical video signal. Thus claim 1 complies with Article 123(2) and (3) EPC. The word "same" had already been omitted in claim 1 as maintained. The opposition division said in the decision under appeal that it was a combination of granted claims 1 and 4, i.e. it did not mention the omission. As the opponent did not raise Article 123 EPC or Rule 57a EPC 1973 (now Rule 80 EPC) as a ground for appeal, this matter needs no further consideration.

4. Admittance of documents

As for document I4 furnished together with the opponent's statement of grounds of appeal, the board, in the communication annexed to the summons, expressed doubts as to whether I4 could be admitted pursuant to Article 12(4) of the Rules of Procedure of the Boards of Appeal of the EPO (OJ 2007, 536) (hereinafter: RPBA). The question of admittance of I4 is addressed under points 8.4 and 8.5 below.

Non-patent documents 01 to 09 filed by the opponent with letter of 11 March 2011 were admitted into the proceedings pursuant to Article 13(1) RPBA as far as the opponent had referred to them in writing. Their submission can be considered to be a non-complex reaction to the board's communication, and the patentee did not object to their admittance. 01, 03 and 04 relate

to the admissibility of the oppositions in both appeal cases T 1553/06 and T 2/09, 06 and 07 concern the substance of the former case and the remaining documents 02, 05, 08 and 09 relate to the substance of the latter one. Details of those documents referred to by the board in the present decision will be provided in the relevant sections, if necessary.

The opponent submitted the notarial record in T15 (for I2) only together with its reply to the annex to the summons. It submitted its original, together with the originals of A1 (for I1), A2 (for I2) and of the notarial record in T14 (I4) only in the oral proceedings before the board. The board considers these submissions as a non-complex reaction to the defects of the notarial records indicated in the communication annexed to the summons (at points 3.2.3 and 3.4.2). The patentee did not object to admittance of these documents. For these reasons, the board admits the aforementioned documents into the proceedings pursuant to Article 13(1) RPBA.

## 5. Standard of proof

### 5.1 In general

As for the standard of proof, the board recalls that the EPO standard of proof is generally the "balance of probabilities" (see J 20/85, OJ 1987, 102, point 4 of the Reasons). However, especially in cases where only one party had access to information about an alleged public prior use, the case law has tended toward expecting that the public prior use be proved beyond any reasonable doubt or "up to the hilt" (see e.g. T 55/01, point 4.1 of the Reasons, and T 472/92, OJ 1998, 161,

point 3.1 of the Reasons). The same strict standard was required for Internet disclosures in the decision in case T 1134/06 (see point 4.1 of the Reasons; affirmed in T 1875/06, points 7 to 9 of the Reasons). Conversely, it has been laid down in both the EPO Guidelines and the "Notice from the European Patent Office concerning internet citations" (OJ 2009, 456) that, in examination proceedings concerning Internet citations, the balance of probabilities will be used as the standard of proof for assessing the particular circumstances of a given case, and thus the probative value of the evidence in question. Proof beyond reasonable doubt ("up to the hilt") is not required (see Guidelines for Examination in the European Patent Office, Part C, Chapter IV, point 6.2.2, updated in April 2010, and "Notice from the European Patent Office concerning internet citations", point 3.2). The publication dates of Internet disclosures submitted by a party to opposition proceedings are assessed according to the same principles as are applied in examination proceedings (see Guidelines, Part D, Chapter V, point 3.1.3, updated in April 2010, and "Notice from the European Patent Office concerning internet citations", point 4). In this context the board also refers to a more recent article about current French case law on affidavits drawn up by bailiffs detailing facts witnessed on the Internet ("Le constat d'huissier sur Internet"; see Attachment 3 to the annex to the summons). According to that article, French case law requires four technical precautions for finding an affidavit to be reliable: a precise description of the equipment used; a mention of the IP address of the connection; assurance that the connection operates without a proxy server; and the deletion of caches, temporary files and forms.

5.2 In particular the impact of the test nature on the standard of proof

It should be noted that the present contrived test case differs from a corresponding unplanned (real-life) test case, such as the (alleged) infringement of a patent further to which legal proceedings are initiated against only one of several parties which have all allegedly infringed the patent in the same jurisdiction. The present case differs insofar as the board, which has the duty to take into account all the facts pertaining to the case, must therefore also consider those facts that specifically relate to the contrived test nature of the case. This may have an impact on the standard of proof. For instance, if both parties agreed that a certain document, such as I1, I2 or I4 (T14), had been found on the Internet and it were clear that this was a precondition for the test case to make sense, this might weigh in favour of this assertion, corroborate any notarial declaration and make stricter requirements, such as those imposed by French courts (see attachment 3 to the annex to the summons), become redundant. In a corresponding real-life case, the board might arrive at a different conclusion.

Thus the outcome of a contrived test case such as the present one may, in those respects that differ from a real-life test case, be of limited use for parallel real-life situations. That is the risk that the parties incur when presenting a contrived test case.

6. Main request

6.1 Background

The opposition division, in the decision under appeal, considered that document I1 formed part of the state of the art and anticipated the subject-matter of claim 1. In this respect, the board notes that document I1 includes (nearly identically) the wording of claim 1 according to the main request, together with pertinent parts of the description. I1 was allegedly found on the Internet on 15 November 1999 at the URL

[http://www.gironet.nl/home/morozov/CIE/DISPLAY\\_DEVICE](http://www.gironet.nl/home/morozov/CIE/DISPLAY_DEVICE).

Document I2 comprises the whole of document I1, together with an appended text portion, i.e. (nearly identically) the wording of claim 2 according to the main request (without the reference to claim 1), together with parts of the description pertaining to that claim 2. The patentee referred to I2 as apparently being an update of I1. I2 was allegedly found on both 12 and 31 January 2000 under the same URL as I1. According to both parties, that URL no longer exists.

In the light of the foregoing the only novelty-related issue for the subject-matter of claim 1 is whether the content of I1, i.e. I1 and the corresponding part of I2, constituted prior art within the meaning of Article 54 EPC 1973 at the filing date. Pursuant to paragraph 2 of that provision:

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.



According to the case law of the boards of appeal, information is "available to the public" if only a single member of the public is in a position to gain **access** to it and understand it, and if said member of the public is under no obligation to maintain secrecy (see T 1081/01, point 5 of the Reasons, affirmed by T 1309/07, point 3.2.1 of the Reasons). Whether or not a member of the public has **actually** accessed the information is irrelevant (see T 84/83, point 2.4.2 of the Reasons).

- 6.2 Whether the content of I1 forms prior art because it was communicated to the opponent's representative

The parties admitted that there was a substantial level of co-operation between them and other professional representatives in order to create a test case. For the board, this explains why it was possible that Mr. Mooij, the representative of the opponent DSM IP Assets B.V. and also of DSM N.V. (DSM Patents & Trademarks) at whose request notarial records were drawn up, submitted the documents now referred to as I1 and I2 within the framework of third-party observations under Article 115 EPC 1973. According to the notarial records I1 was found on the Internet on 15 November 1999 and I2 on 12 and 31 January 2000, i.e. before the filing date of the patent application from which the present patent originates. Mr. Mooij's access to the documents, now referred to as I1 and I2, before the filing date, however, did not put these into the public domain. This is because a non-disclosure agreement (NDA) not to divulge the respective information had been concluded. According to the patentee's remarks in the oral proceedings before the board, which the opponent did not

contest, that agreement was binding, among others, for Messrs. Cohen (patentee's representative), Mooij (opponent's representative) and de Vries (professional representative involved in the preparation of the test case) until publication of the patent application (which took place on 7 June 2000). The then applicant also mentioned in its letter of 10 October 2000 in the proceedings up to grant that "both Mr. de Vries and Mr. Mooij were bound to [sic] a non-disclosure agreement pertaining to the subject-matter of the present European patent application" (see page 2, second full paragraph).

### 6.3 Whether the content of I1 existed on the Internet

#### 6.3.1 Technical background and definition of terms

In their written and oral submissions, the parties have used technical terms such as "Internet", "Web", "webpage", "URL" and "web search engine". In order to avoid any confusion and to facilitate the reader's understanding of the technical issues, these and other technical terms of the decision will now be defined and briefly explained. The following explanations refer to the situation at the time of the alleged publication of documents I1 to I4 i.e. between 15 November 1999 and 31 January 2000.

The "Internet" is a global system of interconnected computer networks which communicate via a standard Internet protocol suite (TCP/IP). The "World Wide Web", also commonly referred to as "the Web", is a network of interconnected documents or information resources on the Internet, containing text and/or multimedia information. The terms "Internet" and "Web" are thus not equivalent,

the Web being only a part of the Internet. Other parts of the Internet include, for instance, the infrastructure to support "electronic mail" (commonly known as "e-mail").

A "webpage" is a document or information resource which is stored on the Web and can be accessed, for instance, via a "web browser". In order to access and display a webpage an Internet user can enter the "Uniform Resource Locator (URL)" of the webpage in a web browser or click on a "hyperlink" leading to that webpage, the URL forming a specific address at which the webpage can be found on the Web. Alternatively, in particular when the URL is not known to the user, a webpage of interest can be found by entering a search query (typically one or more keywords) in a "web search engine". The web search engine then returns a list of webpages which match the entered keyword(s). A webpage can only be found via a web search engine by entering keywords if the search engine knows its URL and has indexed the webpage with keywords. There are basically two ways in which a webpage can become known to a web search engine: (1) someone, usually the creator or administrator of the webpage, supplies its URL to the search engine (it is common ground between the parties that the creator or administrator can also supply keywords to the search engine); or (2) the webpage is discovered by one of the "web crawlers" of the search engine. Web crawlers are computer programs which explore the Web in a methodical, automated manner. A common way for a web crawler to discover an unknown webpage is by following a hyperlink present on a known webpage which points to (the URL of) the unknown page. Once the URL of a webpage is known to the search engine, the webpage is accessed and indexed

based on keywords generated by the search engine from the text (including hidden text known as "meta tags") of the webpage.

#### 6.3.2 The notarial records and the parties' agreement

The board notes that the opponent, in support of its contentions that I1 and I2 existed on the Internet, filed originals of the corresponding notarial records A1 (for I1) and A2 and the notarial record in T15 (both for I2) during the oral proceedings. These records certify that I1 and I2 could be found on the Internet at certain dates and times after entering certain strings of keywords for each of them (see the details above, under point II). Each of these originals bears the signature and stamp of a Dutch notary public, and I1 and I2 were attached to the associated notarial record(s). Both A1/I1 and A2/I2 and the notarial record of T15/I2 were bound in one folder each. In addition, **the patentee**, in reply to a question by the chairman in the oral proceedings, confirmed that I1 and I2 could be accessed on the basis of keywords. The board considers the parties' statements to be credible given that this is a test case and the existence of I1 and I2 is a precondition for enabling the board to deal with the gist of the test case.

#### 6.3.3 Conclusion on whether the content of I1 existed on the Internet

In the light of the foregoing the board considers that the opponent has proven beyond reasonable doubt that I1 and I2 could be found on the Internet at the dates and times indicated in A1, A2 and the notarial record in T15

after entering the strings of keywords mentioned in these notarial records. Contrary to the opponent, the board regards the terms "beyond reasonable doubt" and the more colloquial term "up to the hilt" as being equivalent. (See the opponent's reply dated 11 March 2011 on page 14 at point 2.5, where reference is made to an "up to the hilt" test in the first paragraph and to a "stricter test" of "beyond any reasonable doubt" in the third paragraph.) Given that both parties agree that I1 and I2 existed on the Internet at the dates and times indicated in the notarial records, the question as to whether the reported requirements of the French courts for Internet disclosures mentioned above (under point 5.1) would, in the absence of such agreement, have to be fulfilled (in the present case they are not) for acknowledging proof beyond reasonable doubt may therefore be left an open one. The same applies to the more general question as to the proper standard of proof.

6.4 Whether the content of I1 forms prior art because the notary actually found it on the Internet

As stated, it has been proven that a Dutch notary public found I1 on 15 November 1999 and, again, as part of I2, on both 12 and 31 January 2000 on the Internet on the basis of certain keyword strings.

However, the board does not consider that the content of I1 was divulged to the public by the fact that the notary public had seen it before the filing date. This is because from the test nature of the present case it must be concluded that the notary was under a duty to keep this content confidential. Otherwise the test case would be largely moot.

According to the opponent (reasoning against its case) it might be argued that the notary was not "the public". Firstly, there was no evidence that the notary was a skilled person i.e. someone who would understand the content of what he found. Secondly, arguably, a notary would have a duty of confidence to keep all information obtained in a professional context secret. The opponent also maintained that it would be for the patentee to show that the notary was not a member of the public and, in the absence of pertinent evidence, the notary was.

The board disagrees that the notary was a member of the public. The board wonders, in relation to the opponent's second point above, how the burden of showing that the notary acting on behalf of DSM N.V. (DSM Patents & Trademarks) had a duty of confidence could conceivably be upon the patentee. The notarised documents I1 and I2 were furnished by the opponent, DSM IP Assets B.V. Given the co-operation between the parties in this test case and the non-disclosure agreement mentioned above, the board considers it highly unlikely that the opponent's representative, who also acted for DSM N.V. (DSM Patents & Trademarks), would have left it up to the notary's discretion to decide whether or not to divulge the contents of I1 and I2 supposing *arguendo* the notary was not bound by professional rules or public law not to divulge them. This would have rendered the test case in relation to I1 and I2 largely moot. The opponent's contentions in this respect are therefore not intelligible. As the board considers that the notary was not entitled to disclose the content of I1, as included in I1 and I2, the opponent's first point whether the

notary had the technical knowledge to understand that content is of no relevance.

6.5 Whether the content of I1 forms prior art for the sole reason that I1 or I2 existed on the Internet

#### 6.5.1 Introduction

Regarding public availability of a disclosure the case law has distinguished a number of concepts. In T 952/92 (OJ 1995, 755) the board found (see point 2.1 of the Reasons):

whatever the means of disclosure (written description, oral description, use, etc.), **availability** in the sense of Article 54(2) EPC involves **two separate stages**: availability of the **means of disclosure**, and availability of **information** which is **accessible and derivable from such means**. (Emphases added)

The board made this statement in conjunction with a quote from G 1/92 (OJ 1993, 277, see point 1.2 of the Reasons):

Article 54(2) EPC [1973] does not make any distinction between the different means by which any information is made available to the public. Thus, information deriving from a use is governed in principle by the same conditions as is information disclosed by oral or written description.

The board in T 952/92 also said:

In other words, the disclosure of a written description is the information which a skilled person can learn by reading it, the disclosure of an oral description is the information that a skilled person can learn by hearing it, and the disclosure of a product which has been used is the information that a skilled person can learn from it, either visually or by analysis for example.

In this regard, the board deciding on the present case draws attention to the fact that the parties and a number of board decisions quoted from in the present

decision sometimes use the term "information" as a synonym for "means of disclosure".

In the patentee's view it is the **Internet** that forms the **means of disclosure** in the present case, and the Internet must be exposed to deliberately chosen specific external conditions, i.e. a very special set of keywords, must be submitted, to find I1. This exercise constitutes "undue burden" as referred to in G 1/92, which excludes public availability of I1. (This view is analysed at point 6.7.2 below.)

The board notes as a preliminary observation that G 1/92 deals with the availability of information which is accessible and derivable from (the use of) a commercially available **product**. The availability of the means of disclosure, i.e. the availability of the product itself, however, is not in question in G 1/92.

As to the availability of the means of disclosure, the question of whether I1 forms prior art for the sole reason that it existed on the Internet, i.e. independent of whether it could be found by using keywords or by guessing the URL, logically precedes the question whether I1 became publicly available because it could be found on the basis of keywords or its URL. As a consequence, the board will start by considering that it is **not the Internet but I1 itself that forms the means of disclosure**.

The board will first explain the case law on the availability of **written disclosures** which does **not** rely on G 1/92.



Thereafter the board will analyse whether G 1/92 is also relevant for dealing with the question of availability of the **means of disclosure**, independent of whether that means is a product (as in G 1/92) or a written description or any other means of disclosure and, if so, what is the impact of G 1/92 on the availability of document I1 and I2, allegedly found on the Internet.

Finally, the board will compare the results of both enquiries and answer the question in the heading.

#### 6.5.2 The case law on the public availability of written descriptions

According to the EPO publication "Case Law of the Boards of Appeal of the EPO", 6th edition, 2010, at I.C.1.8., referring to T 444/88, "Board of appeal case law has established that the **theoretical** possibility of having access to information renders it available to the public". (Emphasis added)

T 444/88 (see point 3.1 of the Reasons) dealt with a situation where, in the course of grant proceedings, an additional example was introduced in an application document already available to public inspection. The board held that that example shared the fate of that document and was also "made available to the public". It was not necessary as a matter of law that any member of the public had to be aware that the example was introduced into the document, and therefore was available for inspection on request. It was sufficient that the document was in fact available to the public before the priority date of the patent in suit, whether or not this was known by any member of the public, and

whether or not any member of the public actually inspected the document.

In the same vein it was considered in T 1127/00 (at point 9) that "It is established jurisprudence of the Boards of Appeal ... [citing the 4th edition of the "Case Law", at I.C.1.6, 42] that the theoretical possibility of having access to information renders it available to the public."

Moreover, the decision in case T 381/87 (OJ 1990, 213) dealing with an article in a scientific journal may be seen as also expressing this view. Headnote 3 starts with the phrase:

If a document in a library "would have been available to anyone who requested to see it" on a particular day, such fact is sufficient to establish that the document was "made available to the public" on that day.

In the decision the board said (see point 4(4)(b) of the Reasons):

It is not necessary as a matter of law that any members of the public would have been aware that the document was available upon request on that day, whether by means of an index in the Library or otherwise. It is sufficient if the document was in fact available to the public on that day, whether or not any member of the public actually knew it was available, and whether or not any member of the public actually asked to see it.

Nevertheless, two other decisions, i.e. T 314/99 and T 186/01, in the board's analysis, did not accept that a mere theoretical possibility of having access to a means of disclosure rendered it available to the public.

In T 314/99 the board was prepared to take the view that D6, a diploma thesis, arrived in the archive before the relevant priority date (see point 5.4.4 of the Reasons) but also said that:

However, in the Board's judgment D6 did not by its mere arrival in the archive become publicly available, since that did not mean it was as of that point in time catalogued or otherwise prepared for the public to acquire knowledge of it, and because without such means of information the public would remain unaware of its existence. [See point 5.5 of the Reasons]

... the possibility that the public could acquire knowledge or awareness of the existence of D6 is a precondition of its public availability before the priority date of the patent in suit. [See point 5.6 of the Reasons]

In T 186/01 (at point 4 of the Reasons) the board held that:

... the accessibility to the library for the public is not proven. D10 [an internal work report by the German Federal Institute for Agriculture ("Bundesforschungsanstalt für Landwirtschaft")] did not by its mere arrival in the archive become publicly available, since that did not mean that it was as of that point in time catalogued or otherwise prepared for the public to acquire knowledge of it, and because without such means of information the public would remain unaware of its existence. However, the possibility that the public could acquire knowledge or awareness of the existence of D6 is a precondition of its public availability before the priority date of the patent in suit (see T 314/99, sections 5.1 to 5.6).

As to the above case law, the board questions that the three decisions cited in favour of a mere theoretical accessibility being sufficient were cases in which the document was only theoretically accessible:

- in T 444/88, if an application document is already available for public inspection, the public will assume that it may be amended, e.g. by introducing an additional example;

- in T 1127/00 (see point 8 of the Reasons) the document in question was an article published in a scientific journal. The nominal publication date was one day before the (relevant) second priority date of the patent in suit, a Thursday, and members of the public could

purchase a copy of the journal from the editorial office on and after the Wednesday of each week in which it was published;

- in T 381/87, the journal in question was issued regularly, and it was possible for an interested member of the public to ask for the latest issue (see point 4(4)(b)(ii) of the Reasons).

### 6.5.3 Opinion G 1/92

#### (a) Background

Even though G 1/92 only relates to the availability of information which is accessible and derivable from the (use of) a commercially available product, in T 165/96 the board did rely on G 1/92 in dealing with the question of availability of the **means of disclosure**. The board held that information was "available" once members of the public could **theoretically** become aware of it. The case dealt with technical information in an insert in a minor small-ads newspaper (circulation: 24000) distributed in the suburbs of Copenhagen. The patentee had argued that the publication should not be regarded as directly available to the public without **undue burden** relying on G 1/92. On this argument the board noted that the patentee's interpretation would introduce into the consideration of novelty precisely that **subjective element** which in G 1/92 the Enlarged Board had sought to exclude. That argument was therefore not valid.

Taking this holding at face value, one might conclude that the mere existence of I1 on the Internet was sufficient to make it become publicly available because, after all, members of the public could also

theoretically become aware of it. In order to find out whether such a conclusion is warranted, the board will proceed to an analysis of G 1/92.

(b) The answer given by G 1/92

The referral to the Enlarged Board concerned the interpretation of the requirement "made available to the public" in relation to the prior use of a commercially available product. As stated, the decision deals with the availability of information which is accessible and derivable from a commercially available product as a means of disclosure, not with the availability of the means of disclosure (i.e. the product itself). The Enlarged Board answered the questions put by the President of the EPO as follows:

1. The chemical composition of a product is state of the art when the product as such is available to the public and can be **analysed and reproduced** by the skilled person, **irrespective of whether or not particular reasons can be identified for analysing the composition.**
  2. The same principle applies mutatis mutandis to any other product.
- (Emphases added)

(c) Undue burden

In the Reasons for its Opinion, the Enlarged Board made some "general remarks on the kind of information which can be derived from the public use of products for the purpose of the application of the requirement 'made available to the public' in Article 54(2) EPC." The Enlarged Board *inter alia* said:

- 1.4 ... Where it is possible for the skilled person to **discover** the composition or the internal structure of the product and to **reproduce** it **without undue burden**, then both the product and its composition or internal structure become state of the art.

2. There is **no support** in the EPC **for the additional requirement** ... that the public should have particular **reasons for analysing a product** put on the market, in order to identify its composition or internal structure. ... It is the fact that **direct and unambiguous access** to some particular information is possible, which makes the latter available, whether or not there is any reason for looking for it.

2.1 The introduction of such an additional requirement would ... obviously represent an element of **subjectivity** leading to **uncertainty** in applying the **concept of novelty** as defined in ... Article [54(2) EPC].

(Emphases added)

In this respect, the board in T 952/92 (under point 2.2 of the Reasons) noted that the reference in Opinion G 1/92 to the term "without undue burden" was not strictly necessary for providing an answer to the referred questions, and therefore could not have been intended to alter or add to the existing law concerning what constituted "the state of the art". The concept of reproduction of a product "without undue burden" was traditionally associated with the question of "sufficiency" of a description of an invention in a patent specification. The concept of reproducibility "without undue burden" had also been extended by analogy to cases concerning novelty, where a prior document described a product such as a chemical compound which was the subject of a claim in a patent. Such a description of a product did not render the product "available to the public" if a skilled person was unable to make the product, using his common general knowledge and "without undue burden" (in other words, in the absence of an "enabling disclosure"). The board in T 952/92 went on to say:

However, the **extension** of application of the concept "without undue burden" **from reproduction** of what has been described in a prior document **to the discovery** of what is not yet known about a previously sold product (namely, its composition or internal structure) would

involve very different considerations, and the Board does not accept either that that was intended by the Enlarged Board of Appeal in Opinion G 1/92, or that it is legally correct.

...

In the Board's view, to apply the concept of "without undue burden" to the determination of the composition or internal structure of a prior used product which cannot be ascertained visually (for example by analysis) would introduce a **subjective element into the determination of novelty, which was specifically rejected by the Enlarged Board in Opinion G 1/92** ... On the contrary, ... in the Board's view it is the fact that **direct and unambiguous access to information concerning the composition or internal structure** of a prior used product is possible, for example by **means of analysis**, which makes such composition or internal structure "available to the public" and thus part of the state of the art for the purpose of Article 54(2) EPC. If such an analysis is possible in accordance with the **known analytical techniques** which were available for use by a skilled person before the relevant filing date, the composition or internal structure thereby is available to the public.

... the analysis by a skilled person of a product which has per se been "made available to the public" by means of prior sale for example, using available analytical techniques, can be considered as equivalent to the reading by a skilled person of a written description in a document which has per se been "made available to the public". The likelihood or otherwise of such a skilled person either reading such a written description, or analysing such a prior sold product, and the **degree of burden (i.e. the amount of work and time)** involved in such reading or analysing, **is in principle irrelevant** to the determination of what constitutes the state of the art.

(Emphases added)

The board in T 952/92 thus held that the phrase "without undue burden" in point 1.4 of G 1/92 quoted above did not govern the "discovery" of the composition or internal structure, but only its reproduction.

(d) No "element of subjectivity"

As indicated above, in T 165/96 dealing with technical information in an insert in a minor small-ads newspaper the patentee relying on G 1/92 had argued that the publication should not be regarded as directly available to the public without undue burden. The board rejected this argument considering that the patentee's interpretation would introduce into the consideration of novelty precisely that subjective element which in G 1/92 the Enlarged Board had sought to exclude. The Enlarged Board had rejected an additional requirement that the public should have particular reasons for analysing a product in order to identify its composition or internal structure because the introduction of such an additional requirement would represent "an element of subjectivity leading to uncertainty in applying the concept of novelty as defined in ... Article [54(2) EPC]."

#### 6.5.4 The present board's position

As discussed above under point 6.5.1, in T 952/92 the board found (see point 2.1 of the Reasons) that:  
whatever the means of disclosure (written description, oral description, use, etc.), **availability** in the sense of Article 54(2) EPC involves **two separate stages**:  
availability of the **means of disclosure**, and  
availability of **information** which is **accessible and derivable from such means**. (Emphases added)

The present board agrees with this statement. Moreover, in the present board's view, and in line with T 165/96, as the Enlarged Board ruled that applying the concept of novelty **must not depend on an element of subjectivity**, such element must not only be excluded in determining



the availability of information which is accessible and derivable from a means of disclosure, such as the composition or internal structure of a commercially available product, but **also in the preceding stage of determining the accessibility of such means**. In both situations the **degree of burden involved is in principle irrelevant** to the determination of what constitutes the state of the art.

The board considers that this principle does however not mean that **theoretical** access to the means of disclosure is sufficient, as stated in T 165/96. In line with the decisions referred to above, under point 6.5.2, what is decisive is the **practical** possibility of having access to the means of disclosure. More specifically, this view can be derived from decisions T 314/99 and T 186/01 and is not contradicted by T 444/88, T 1127/00 and T 381/87 (OJ 1990, 213). The board bases its stance on the assumption that if the public, in practice, **remains unaware of the existence of a certain means of disclosure or has no access to the means of disclosure**, then there is no reason to deny a patent applicant or patentee a patent in return for the divulgation to the public of the information embodied in that means of disclosure, subject to the remaining patentability requirements being fulfilled. In addition, considering theoretical access to be sufficient would make it possible to hide documents on the Web, which would nevertheless belong to the state of the art. Such documents may be referred to as **hidden publications**. These could be an attractive tool for some to put the success of a patent application or the validity of a patent into question. This is because it would be in the hands of the authors of hidden publications to unearth

them at their whim. This would jeopardize legal certainty. The board therefore recognises a public policy interest in preventing hidden publications.

The considerations in the preceding paragraph do not run counter to the analogy made in the second paragraph of the present point 6.5.4 between determining the availability of information which is accessible and derivable from a means of disclosure, such as the composition or internal structure of a commercially available product, and determining the accessibility of such means, with the degree of burden involved being in principle irrelevant in both situations. Indeed, where practical access is not possible, this can be likened to the composition or internal structure of such a product not being discoverable by known analytical techniques and thus not being regarded as "made available to the public" because no "direct and unambiguous access" to it is possible.

For the above reasons the board considers that the requirement of "**direct and unambiguous access**", set out in G 1/92 (OJ 1993, 277) and T 952/92 (OJ 1995, 755), should apply not only to access by the skilled person to information concerning the composition or internal structure of a commercially available product, but also to access by at least one member of the public to the means of disclosure.

In the case of the World Wide Web, given its enormous size, the fact alone that a document exists there does not go beyond mere **theoretical** accessibility. In order to conclude that the document is available to the public, it must further be established that **direct and**

**unambiguous access** to it by known means and methods is possible.

6.5.5 Conclusion on whether the content of I1 forms prior art for the sole reason that I1 or I2 existed on the Internet

It follows from the above that the mere fact that I1 and I2 existed on the World Wide Web is not sufficient to consider them as having been made available to the public. Until it is established that **direct and unambiguous access** to them by known means and methods was possible before the filing date, the access remains only theoretical and therefore does not meet the requirement of "made available to the public" within the meaning of Article 54(2) EPC 1973.

The board will now examine whether direct and unambiguous access to I1 or I2, and thus to the content of I1, was possible.

6.6 Whether direct and unambiguous access to I1 or I2 was possible on the basis of their URL

The (identical) URL of webpages I1 and I2, i.e. the character string [http://www.gironet.nl/home/morozov/CIE/DISPLAY\\_DEVICE](http://www.gironet.nl/home/morozov/CIE/DISPLAY_DEVICE), represents a specific address indicating where to find I1 and I2 on the World Wide Web. In other words, the URL reveals the access path to I1 and I2.

As explained under points 6.2 and 6.4 above, this character string was not disclosed, either orally or in written form, before the filing date of the patent in suit to any person not bound by confidentiality, i.e. to

a person outside the group of people consisting of those involved in setting up the test case and the notary public.

The URL of I1 and I2, however, was known to the web search engine AltaVista. Therefore the question arises whether a member of the public could have had **direct and unambiguous access** to this URL (and to I1 and I2) via AltaVista. This question will be discussed by the board in section 6.7 below.

Prior to that discussion, the board must also consider the possibility, submitted by the opponent, that the URL could have been guessed with some basic IT skills and a few attempts. If so, the URL might have provided direct and unambiguous access to I1 and I2.

The board cannot exclude that there might be URLs which are so straightforward, or so predictable, that they could readily be guessed exactly and thus be regarded as providing direct and unambiguous access to the webpages at those URLs. However, this is conceivable only in exceptional cases. Otherwise, access to the content stored at the URL will only be theoretical, which, as found in section 6.5 above, is not sufficient for considering that content to be publicly available.

The board does not consider it to be straightforward for a member of the public, even one with IT skills, to guess the full URL

[http://www.gironet.nl/home/morozov/CIE/DISPLAY\\_DEVICE](http://www.gironet.nl/home/morozov/CIE/DISPLAY_DEVICE).

Guessing the term "morozov", at any rate, would by no means be straightforward without knowledge of the terms in the URL.

In the light of the foregoing, the board concludes that guessing the URL of I1 and I2 did not provide direct and unambiguous access to I1 and I2, and thus did not make these documents, and thereby the content of I1, available to the public.

For the sake of completeness, the board observes that the situation in which a URL must be guessed in order to access a webpage is analogous to the situation in which access to a document is protected by a password which members of the public have no means of obtaining except by guessing.

6.7 Whether direct and unambiguous access to I1 was possible because it could be found on the basis of keywords

6.7.1 How I1 could be found by entering keywords

I1 was found on 15 November 1999 on the basis of the keyword string "CATHODE RAY TUBE and GRID and THREE ELECTRON BEAMS and PHOSPHOR" in the AltaVista search engine. This is regarded as proven in view of notarial record A1 and of the fact that the patentee does not dispute it (see points 6.3.2 and 6.3.3 above).

The content of I1 was again found as part of I2 on the basis of

- the keyword string "THREE CATHODES and PHOSPHOR SCREEN and CONVERGENCE" in the AltaVista search engine on 12 January 2000 (regarded as proven; see points 6.3.2 and 6.3.3 above) and
- the keyword string "CATHODE RAY TUBE and GRID and THREE ELECTRON BEAMS and PHOSPHOR" in the AltaVista

search engine on 31 January 2000 (regarded as proven; see points 6.3.2 and 6.3.3 above).

Given that I1 could be found on the basis of keywords, I1 must have been indexed. The parties agree that I1 was indexed (for I2 see section 7 below, in the context of the first auxiliary request).

#### 6.7.2 The patentee's analogy to G 1/92

As mentioned above, at point 6.5.1, in the patentee's view it is the Internet that forms the means of disclosure in the present case. The patentee denied that document I1 was made publicly available due to the fact that it could be found on the basis of keywords. The patentee contended that in order to reveal the contents of documents I1 and I2 one needed to expose the Internet to a very particular interaction, viz. in the form of submitting a very special set of keywords or a particular character string as the URL of the document on the Web. Here the patentee drew an analogy with the *exposure of a product to a deliberately chosen specific external condition* which revealed particular properties of that product. In such a situation the information in point was considered in Opinion G 1/92 of the Enlarged Board of Appeal not to be available to the public. This Opinion indicated that the requirement "made available to the public" was satisfied provided that there was direct and unambiguous access to particular information which made the latter available. In the present case, an analysis under specifically chosen circumstances of the Internet to derive the features of the claims as granted would constitute **undue burden**.

The board has already elaborated extensively on the criterion "undue burden" above, under point 6.5.3(c). In respect of the patentee's submissions on the *exposure to interaction with specifically chosen outside conditions*, the board draws attention to the proviso under point 3 of G 1/92, which relates to "a commercially available product":

It may be added that a commercially available product per se does not implicitly disclose anything beyond its composition or internal structure. Extrinsic characteristics, which are only revealed when the product is exposed to interaction with specifically chosen outside conditions, e.g., reactants or the like, in order to provide a particular effect or result or to discover potential results or capabilities, therefore point beyond the product per se as they are dependent on deliberate choices being made. Typical examples are the application as a pharmaceutical product of a known substance or composition (cf. Article 54(5) EPC [1973]) and the use of a known compound for a particular purpose, based on a new technical effect (cf. G 2/88, OJ EPO 1990, 93). Thus, such characteristics cannot be considered as already having been made available to the public.

This passage was interpreted by another board as follows (see T 301/94, point 3.6 of the Reasons):

Item 3 of opinion G 1/92 refers to the use of a known compound for a particular purpose, based on a new technical effect as defined in G 2/88, and it is stated in this context that such characteristics cannot be regarded as having already been made available to the public when the compound itself is available to the public. The situation considered by the Enlarged Board of Appeal ... concerns **a claim** relating to a **new use of a known compound** reflecting a newly discovered **technical effect** and **not a claim to the compound itself**. It is the new technical effect which constitutes a hidden or secret feature, not the composition itself or one component thereof. (Emphases added)

In the board's opinion, the patentee's view that there is an analogy between the need to submit a set of keywords, whether "very special" or not, to a search engine and the exposure of a product to an external

condition as dealt with in G 1/92, cannot be accepted for the following reasons.

- *Whether the World Wide Web can be regarded as a product in the sense of G 1/92*

As a preliminary matter it should be recalled that G 1/92 deals with the composition or internal structure of a commercially available product, such as a chemical product or a mechanical or electrical article. One condition for this composition or internal structure to be state of the art is that it can be analysed and reproduced by the skilled person. In contrast thereto, the World Wide Web (the relevant part of the Internet in the present case) is essentially a global repository of interconnected documents stored in electronic form. In other words, the Web could be viewed as an enormous library of electronic documents.

Assimilating the Web (or a library) to a commercially available product in the sense of G 1/92, is thus already *prima facie* far-fetched and, in the present board's judgement, goes beyond the intent of the Enlarged Board of Appeal in G 1/92.

Moreover, in contrast to that of a "normal" commercially available product considered in G 1/92, the composition or internal structure of the Web constantly changes, in fact in fractions of a second, making it impossible in practice to discover at any given time its whole composition or internal structure by using known analytical techniques.



For these reasons, the board cannot accept the patentee's argument that the Web should be regarded as a product in the sense of G 1/92 and that documents found on the Web by entering keywords would be akin to revealing extrinsic characteristics pointing beyond that product per se. It follows that the patentee's analogy of the exposure of the Web to a very special set of keywords with the exposure of a product to a deliberately chosen specific external condition has no object.

### 6.7.3 Can a specific test be defined?

As explained under section 6.5 above, the mere fact that a document existed on the World Wide Web is not sufficient to consider it as having been made available to the public. Unless it is established that **direct and unambiguous access** to it was possible before the filing or priority date, the access remains only theoretical and therefore does not meet the requirement of "made available to the public" within the meaning of Article 54(2) EPC 1973.

- *Keyword(s) unrelated to the essence of the content of the document*

In the board's view, the fact that a document could be found with the help of a public web search engine by using one or more keywords does not automatically allow to conclude that **direct and unambiguous access** to that document was possible. This is a consequence of the fact that it is possible to store a document on the Web in such a way that it is indexed by a public web search engine only with (one or more) keyword(s) unrelated to

the essence of the content of the document, thus making it impossible to find it by entering only keywords related to the essence of the content of the document.

The following fictitious two examples illustrate such a situation.

In a first example, an electronic image file containing a description of an improved television receiver is stored on a new webpage created at a hitherto unknown URL. The arbitrary character string "lk8zhd94j87hir" is attached as a keyword to the webpage, either as a title or as a meta tag. The creator of the webpage then supplies the URL to a public web search engine. The search engine follows the URL and indexes the webpage with the only keyword available i.e. "lk8zhd94j87hir". It should be noted that the text of the description of the technical product is not detected by the search engine because it is stored as an image (i.e. as pixels, not as alphanumeric characters) and thus is not recognised as text by the search engine (assuming that the search engine does not perform optical character recognition (OCR) on the image).

In the above example, the description of the improved television receiver could be found via the search engine, but only by using the keyword "lk8zhd94j87hir" which, clearly, has nothing to do with the television receiver. The description of the improved television receiver would therefore be theoretically accessible by entering keywords, but impossible to find in practice.

In a second example, the facts are the same as in the first example except that the word "adoxography" (a late

19th-century word meaning "skilled writing on an unimportant subject") is used instead of the arbitrary character string "lk8zhd94j87hir". Although "adoxography", in contrast to "lk8zhd94j87hir", is a known word, it still has nothing to do with a television receiver and thus it would be at least questionable whether direct and unambiguous access to the technical content of the description of the improved television receiver was possible if it was only established that the document was found by entering the keyword "adoxography" in the search engine.

- *Time period during which the document remained accessible*

Another important factor which must be considered in the case of a document stored on the World Wide Web is the length of time during which the document remained accessible. A document stored at a given URL may be deleted at any time by its owner/creator. It is thus technically possible to store a document at a given URL only for a very short period of time.

In order for the requirement of "direct and unambiguous access" to be met, it is thus a necessary condition that a document stored at a given URL on the Web remain accessible there for a sufficiently long period of time. Indeed, too short a period of time would effectively make it impossible to access the document. The minimum amount of time required for allowing **direct and unambiguous access** by a member of the public to a document must be assessed on a case-by-case basis, taking into account all the circumstances of the case.

- *Conclusions and proposed test*

In the light of the above considerations, the board considers that the fact that a document stored on the World Wide Web could be found by entering keywords in a public web search engine before the priority or filing date of the patent or patent application is not always sufficient for reaching the conclusion that "direct and unambiguous access" to the document was possible. That conclusion may be correct in most cases but, under certain (unusual) circumstances, it may not be.

However, where all the conditions set out in the test below are met, the board is of the opinion that it can be safely concluded that a document stored on the World Wide Web was made available to the public. This test is defined as follows:

*If, before the filing or priority date of the patent or patent application, a document stored on the World Wide Web and accessible via a specific URL*

*(1) could be found with the help of a public web search engine by using one or more keywords **all** related to the essence of the content of that document and*

*(2) remained accessible at that URL for a period of time long enough for a member of the public, i.e. someone under no obligation to keep the content of the document secret, to have direct and unambiguous access to the document,*

*then the document was made available to the public in the sense of Article 54(2) EPC 1973.*

As to this test, the board draws attention to the following:

- If any of conditions (1) and (2) is not met, the above test does not permit to conclude whether or not the document in question was made available to the public. In such a situation, in particular where condition (1) is not met, it must be examined on a case-by-case basis whether there were other circumstances possibly providing direct and unambiguous access to the document, such as a written or oral disclosure of the URL, the presence of the URL (e.g. in a hyperlink) on a webpage available to the public, the document being accessible via a public web search engine not using keywords as search inputs (e.g. based on similarities between images), publication of the document in a Web-based discussion forum, etc.

- The questions of whether keywords are related or unrelated and whether the period of time was long enough will have to be determined in any single case and cannot be described beforehand in abstract terms.

- As Article 54(2) EPC 1973 does not make any distinction between the different means by which any information is made available to the public, the board does not deem it necessary to make an enquiry as to whether a document stored on the Web that meets the conditions of the above test falls under one of the means expressly mentioned in Article 54(2), such as "written description". In any case, such a document will have been made available to the public "in any other way".

#### 6.7.4 The parties' suggestions

The following suggestions by the parties for devising a test on public availability of a document existing on the World Wide Web cannot be accepted.

- *Number of different keywords required*

The patentee suggested that it was necessary that not just one specific search string led to a certain webpage, but that **a number of different (sets of) keywords** did. The board does not consider it to be necessary to add as a criterion that more than one specific (set of) keyword(s) should lead to the document in question. Such a criterion would not add much to the test and would not do away with the need for assessing the keyword string on a case-by-case basis. The criterion is vague because it does not say how many possible strings would have to be there, in which way the keywords would have to differ, etc. Hidden publications could still be created on the basis of a number of different intricate search strings. Apart from that, the several search strings would have to be used at the same time because the Web content constantly changes.

- *Intent of the submitter relevant*

As for the **intent** of the submitter that both parties suggested was an important criterion, in the board's opinion, it is sufficient to recall that the Enlarged Board, in G 1/92, specifically rejected **introducing a subjective element into the determination of novelty**. Thus the intent-based argument must be dismissed on its face.

Other suggestions by the patentee on how to assess content submitted to the World Wide Web cannot be accepted either for the following reasons.

- *In-tray*

If the test set out in previous section 6.7.3 is complied with, there will be no analogy between submitting information to the World Wide Web and sending information to an (albeit electronic) **in-tray**. Contrary to what the patentee contended, the information will then, by analogy, have to be considered as having been delivered to the public.

- *Permission to publish*

Nor will there be an analogy to the **permission to publish** (the patentee had cited T 842/91 in this respect). If the conditions of the above test are met, then the document will be considered as actually published.

#### 6.7.5 Application of the test to I1

In the present case, document I1 was found with the help of the public web search engine AltaVista on the basis of keywords.

(a) The keywords were related

As mentioned above at point 6.7.1, I1 was found with AltaVista on 15 November 1999 on the basis of the keyword string "CATHODE RAY TUBE and GRID and THREE

ELECTRON BEAMS and PHOSPHOR" and the content of I1 was found again at the same URL as part of the content of I2 with the same keyword string on 31 January 2000 and on the basis of the different keyword string "THREE CATHODES and PHOSPHOR SCREEN and CONVERGENCE" on 12 January 2000.

The keywords used in each of those two strings were all related to the essence of the content of I1. **This fact is not in dispute; it was acknowledged by the patentee during the oral proceedings.**

(b) The period of time during which I1 was accessible was largely sufficient

I1 was found on 15 November 1999 and on 12 and 31 January 2000 (I2 including I1) so that the board considers that I1 and I2 existed on the Web at the same URL for two and a half months and nearly three weeks, respectively. Both periods are obviously largely sufficient for a member of the public to have direct and unambiguous access to I1 and I2. It does not have to be decided whether the same result would have been achieved on the basis of the present keywords if it could be established that I1 could be found by search engines for a short period of time only, such as a period of less than 20 minutes on one particular day, as allegedly in the case of document I4.

As for the parties' submissions emphasising the importance of the **point in time** after the filing or priority date until which documents must be found on the Internet in order to be considered as reflecting the situation for retrieving a document at the



filing/priority date, the board is at a loss to see how this could be an issue in relation to document I1. I1, like the other documents I2 to I4 relied on as prior art in the present proceedings, were all retrieved **before** the filing date.

Finally, a member of the public (e.g. not the notary or the persons involved in setting up the test case) who could have found I1 on the Internet before the filing date was under no duty to keep the information embodied in I1 secret.

(c) Conclusion

Against the backdrop of the above findings, the board considers that the test established in previous section 6.7.3 is complied with in relation to document I1 so that I1, as a means of disclosure, was made available to the public before the filing date of the patent in suit. Since the information derivable from I1 could be directly and unambiguously accessed by merely reading I1 (i.e. the information was not encrypted or otherwise rendered inaccessible), it was also made available to the public.

Since document I1 discloses all the features of claim 1 in combination, the subject-matter of claim 1 lacks novelty. The main request can therefore not be allowed.

## 7. First Auxiliary Request

### 7.1 Background

I2 comprises the whole of document I1, together with an appended text portion, i.e. (nearly identically) the wording of claim 2 as granted (without the reference to claim 1), together with parts of the description pertaining to that claim 2. The patentee referred to I2 as apparently being an update of I1. According to the notarial evidence (see document A2 and the notarial record in T15), I2 was found on both 12 and 31 January 2000 under the same URL as I1.

### 7.2 Analogies to the discussion of the content of I1

For the assessment of novelty and/or inventive step it is critical whether document I2 constituted prior art before the filing date of the application from which the patent in suit originated.

The considerations above relating to the content of I1, i.e. I1 and the corresponding part of I2, in respect of whether the content of I1 formed prior art due to its communication to the opponent's representative (point 6.2) and whether it existed on the Internet (point 6.3) and constituted prior art on that basis alone (point 6.5) or because it was found by the notary (point 6.4), apply *mutatis mutandis* to the whole content of document I2. Likewise, as for guessing the URL, given that the URL of I2 is the same as that of I1, the considerations above, under point 6.6, are also valid.

7.3 Differences with the discussion of I1

On 12 and 31 January 2000, I2 was found at a URL, the same as that of I1, which had already been made available to the public, as explained in section 6.7.5 above. In contrast thereto, until 15 November 1999, the earliest day on which there is evidence that I1 could be found by entering keywords in AltaVista, the URL of I1 (and of I2) was still unknown to any member of the public, i.e. to anyone not bound to secrecy. However, for the reasons given below, this difference is not decisive for the present case.

7.4 Whether the whole content of I2 constitutes prior art because I2 could be found on the basis of keywords

7.4.1 Application to I2 of the test proposed under point 6.7.3 above

The patentee argued that I2 was not indexed because I2 could not be found on the basis of the keyword "better convergence", which belongs to the text by which I1 was "updated" so as to become I2. The patentee submitted that a person seeking an improved device would have keyed in "better convergence".

However, these submissions do not lend much support to the assumption that the part of I2 that was appended to I1 was not indexed and, most importantly, that I2 was not shown to be available to the public.

First, the patentee submitted only one try of a search with a search engine that did not lead to any result. The patentee would at least have had to show that

several attempts failed. The patentee also did not use different search terms, such as the word "improved". The fact that the document was not found using the search term "better convergence" does not mean that it would not have been found on the basis of a keyword such as "improvement" or "improved" instead. In order to prove that a text portion was not indexed it is not sufficient to simply point to one term on the basis of which the document in question could not be retrieved. In the appended text of I2 the word "better" was used only once, "improved" or "improvement" were mentioned several times. Should the algorithm controlling the operation of the search engine use frequency of a word as a criterion for indexing, then this could explain why the document was not found.

Second, according to the notarised evidence, I2 was accessed twice, on 12 and 31 January 2000, respectively. However, only on 12 January 2000 was the term "better convergence" entered in AltaVista. On 31 January 2000 the search query did not include this term. There is therefore no evidence on file showing that I2 could not have been found by entering "better convergence" in AltaVista during the 19-day period from 13 to 31 January 2000. During that long period, a web crawler from AltaVista could have visited the webpage to check for updated content because the URL was known to the search engine, and the additional content of I2 would then have been indexed.

Third, and most importantly, the content of I2, including the "updating" portion, is in any case closely related to all the keywords (CATHODE RAY TUBE, GRID, THREE ELECTRON BEAMS, PHOSPHOR, THREE CATHODES, PHOSPHOR

SCREEN, CONVERGENCE) which were used in the two keyword strings entered in AltaVista which led to I2.

For the above reasons, the board considers that condition (1) of the test set out under point 6.7.3 above is met in the case of I2.

Moreover, the board notes that if this test shows that a document was made available to the public, then it is not sufficient to provide counter-evidence that the document could not be found by using other keywords which form part of the text of this document. This is because the test is based on establishing positive evidence of direct and unambiguous access by known means and methods to a document existing on the Web.

According to the uncontested notarised evidence on file, the board considers that I2 remained accessible at the URL from 12 to 31 January 2000. The board regards this period of time to be largely sufficient to meet condition (2) of the aforementioned test.

The board therefore concludes that, based on the test set out under point 6.7.3, document I2 was "made available to the public" because "direct and unambiguous access" to it was possible before the filing date of the patent. Like for I1, the information derivable from I2 was also made available to the public because it could be directly and unambiguously accessed by merely reading I2.

#### 7.4.2 Additional observations

In view of the above conclusion, the question as to whether the additional text of I2 was also made available to the public by the mere fact that it was an update to an already publicly available document (i.e. I1), in analogy with the reasoning in T 444/88, can be left an open one (this question was discussed under point 3.2.5 of the present board's non-binding preliminary opinion in the annex to the summons to oral proceedings).

#### 7.5 Conclusion

It follows from the above that the information content of I2 belongs to the state of the art according to Article 54(2) EPC 1973.

Although I2 discloses all the features of claim 1 of the first auxiliary request, the subject-matter of claim 1 is still novel because its features are not disclosed in combination. However, the subject-matter of claim 1 is **not inventive** because the skilled person seeking to improve the display device and looking at I2 would have combined all the features disclosed in I2, i.e. those corresponding to I1 and those of the "updating" portion of I2, without any need for inventive activity. The European patent can therefore not be maintained on the basis of the first auxiliary request.

8. Second auxiliary request

8.1 Whether I3 (T12) existed on the Internet

In contrast to documents I1, I2 and I4, no notarial record has been submitted as evidence of the **date** and **time** and **circumstances** under which I3 was allegedly found on the Web, nor of its **content**. In the proceedings before the opposition division the opponent stated that no such record had been established.

The board, however, has seen the handwritten notice "Enclosure 1" on the cover of I3. The handwriting looks very similar to the one used for the identically named "Enclosure 1" which is part of I4 (T14) and in relation to which a notarial record had been drawn up (which is equally part of I4/T14). Therefore, the board, in the communication annexed to the summons to oral proceedings, wondered whether the notice on I3 was an indication of the fact that a notarial record was also drawn up for that document, but simply not submitted by the opponent.

In the oral proceedings before the board the opponent clarified its assertion in the letter of 11 March 2011, according to which all of documents I1 to I4 had been notarised by alleging that those documents did not include I3 as referred to in the present decision but the "real" I4, i.e. T14, instead. The opponent maintained its original contention that no notarial record had been established for I3. In the absence of clear evidence to the contrary, the board must continue its analysis on this basis.

In its letter of 10 October 2000 the then applicant claimed that I3 had been submitted to the Internet on 31 January 2000 between 9:20 and 9:40. The opponent filed document I3 together with the notice of opposition in which it was alleged that it was found on the Web before the filing date.

So the question arises whether it has been established by the parties' concurrent declarations alone that I3 existed on the Web. This question may however remain unanswered because, even if I3 existed on the Web in line with both parties' contentions, it was not available to the public. This is because the opponent has neither proven that it was indexed (see point 8.2 below) nor that it was straightforward to guess the unpublished URL (point 8.3 below).

## 8.2 Whether I3 (T12) could be found on the basis of keywords

### 8.2.1 The relevant facts

In the statement of grounds of appeal (at point 2.9) the **patentee** alleged that I3 was submitted to the Web only on one day, i.e. on 31 January 2000, and only between 9:20 and 9:40. Moreover, I3 was not indexed by any search engine, i.e. keywords were not provided to any web search engine. The URL had not been made public before the filing date of the patent in suit. The patentee, in the statement of grounds, did not indicate any facts, let alone file evidence, as to **how** document I3 was allegedly found.

Nor did the opponent do so. In the proceedings before the opposition division the parties did not answer a



corresponding question by the opposition division (see the division's communication of 11 March 2005 relating to I3, under point 3.4, and the opponent's letter of 18 July 2005, under point 3).

In the oral proceedings before the board, the patentee claimed that the opponent found I3 because the patentee told the opponent how to find it. They co-operated in the ambit of a study committee.

The opponent did not comment on this remark. Rather, it alleged that "under the balance of probabilities" a web crawler must have indexed I3 within the short period of 20 minutes during which it could allegedly be accessed on the Web. The patentee denied that 20 minutes sufficed to find I3.

8.2.2 Whether I3 (T12) was indexed by a web crawler (applying basic principles of evidence)

In the light of the opponent's reliance on the "balance of probabilities" in this context, the board deems it necessary to recall some basic principles of the law of evidence, as they have consistently been applied by the boards of appeal.

In opposition proceedings, the burden of proof lies with the opponent requesting revocation of a patent and relying, to that end, on a certain ground for opposition on the basis of asserted facts. It is for the opponent to establish such facts to the required standard of proof. As for the standard of proof, the board in decision T 381/87 (OJ 1990, 213) cited by the opponent said (at point 4(4)(a)):

... in relation to an issue of fact such as in this case when a document was first made available to the public, the EPO ... must decide **what happened having regard to the available evidence, on the balance of probabilities: i.e. it must decide what is "more likely than not" to have happened.** This is the normal standard of proof in proceedings of this nature. (Emphasis added)

As stated above (under section 5), under certain circumstances, the standard of proof required by the boards of appeal may instead be "beyond reasonable doubt".

The opponent asserts that "under the balance of probabilities" a web crawler must have indexed I3 within the short period of 20 minutes during which it allegedly existed on the Web.

As the patentee contests this fact, the opponent bearing the burden of proof must prove it. The opponent, however, did not specifically indicate any evidence to this effect. The board has found no such evidence, in particular not in documents O1 to O9 furnished together with the opponent's letter of 11 March 2011. Pertinent evidence is however required because it is not notoriously known that web crawlers will generally index documents existing on the Web for only 20 minutes.

The opponent's assertion that "under the balance of probabilities" standard a web crawler must have indexed I3 within the short period of 20 minutes has no object, because there is no evidence before the board which the board could scrutinise under that standard. The opponent's assertion must therefore be dismissed.

8.3 Whether I3 constitutes prior art on the basis of its URL

It is common ground between the parties that the URL of I3 was not made public before the filing date of the patent application in suit.

As stated above (under point 6.6), the board cannot exclude that there might be URLs which are so straightforward, or so predictable, that they could readily be guessed exactly and thus be regarded as providing direct and unambiguous access to the webpages at those URLs. However, this is conceivable only in exceptional cases. Otherwise, access to the content stored at the URL will only be theoretical, which, as found in section 6.5 above, is not sufficient for considering that content to be publicly available.

The board does not consider that, for the skilled person, it was straightforward to guess the URL of I3 (T12), i.e. [http://www.gironet.nl/home/morozov/CIE/THRESHOLD\\_115mV/](http://www.gironet.nl/home/morozov/CIE/THRESHOLD_115mV/). This would apply even for those skilled in the art having previously found, with the help of keywords entered in AltaVista, the URL of I1 and I2 which is [http://www.gironet.nl/home/morozov/CIE/DISPLAY\\_DEVICE/](http://www.gironet.nl/home/morozov/CIE/DISPLAY_DEVICE/). The reason is that the term "DISPLAY\_DEVICE" is missing and the board is unable to see how the skilled person, on the basis of I1 and I2, might be induced to look for a threshold value of 115 mV.

For the above reasons, the board concludes that guessing the URL of I3 did not provide "direct and unambiguous access" to I3.

The opponent's arguments relating to **intent** are not convincing. The opponent argued that removal of a document from the Web constitutes admission that the disclosure was public because "else, why remove?"

As explained extensively under point 6.7.4 above, relying on intent would include a subjective element in the analysis of novelty which G 1/92 specifically sought to exclude.

Independent thereof, the board considers that there are a variety of possible reasons for such removal, for instance because the respective document is outdated or no longer relevant (e.g. because a company went out of business) or because the owner of the website was no longer interested in keeping the public informed about a certain topic.

It follows from the above that I3 was not made available to the public on the basis of its URL. Hence it does not form prior art under Article 54 EPC 1973.

8.4 Whether the subject-matter of claim 1 involves an inventive step

Claim 1 of the second auxiliary request is a combination of the features of claims 1, 2 and 3 according to the main request.

While I1 and the "updating" portion of I2 disclose the features of claims 1 and 2 according to the main request (i.e. those in claim 1 of the first auxiliary request), the additional feature of claim 3 according to the main request to which I3 corresponds is not disclosed.

This last feature is that "the cathode modulator (5) is arranged to energise only one of the cathodes (3) provided the signal level of the integrated video signal is less than a predetermined threshold value".

The subject-matter of claim 1 of the second auxiliary request involves an inventive step because there is nothing in the prior art or common general knowledge suggesting to the person skilled in the art trying to improve the display device of I2 (corresponding to claim 1 of the first auxiliary request and regarded as the closest prior art) to energise only one of the cathodes when the signal level of the integrated video signal is less than a predetermined threshold voltage.

The opponent argued during the oral proceedings that, even if I3 were not regarded as forming prior art, the subject-matter of this claim would still be obvious in view of the combined teachings of I2 and I4.

The board cannot share the opponent's argument because I4 teaches what to do when the signal level of the integrated video signal **exceeds** a predetermined threshold voltage, not when the signal level is **less than** a predetermined threshold voltage. Hence, even if I4 were prior art, the combined teachings of I2 and I4 would not render the subject-matter of claim 1 according to the second auxiliary request obvious. It can therefore be left undecided whether I4 should be admitted into the proceedings and whether it belongs to the prior art.

## 8.5 Conclusion

The second auxiliary request can therefore be allowed, and it is not necessary to analyse any of the further auxiliary requests. This means, in particular, that document I4, which would be relevant for the third and fourth auxiliary requests, plays no role, so that its admittance into the proceedings need not be decided upon for this purpose either.

## Order

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

1. The decision under appeal is set aside.
2. The case is remitted to the first instance with the order to maintain the patent on the basis of claims 1 and 2 according to the second auxiliary request filed with the letter of 19 December 2006 and a description to be adapted.

The Registrar:

The Chairman:

K. Boelicke

F. Edlinger