Datasheet for the decision
of 22 July 2011

Case Number: T 1760/09 - 3.2.05
Application Number: 97921016.8
Publication Number: 0968329
IPC: D21F 1/00
Language of the proceedings: EN

Title of invention:
Method in the production of a web material

Patentee:
Stora Enso Aktiebolag

Opponent:
Ultra Technology Europe AB

Headword:
-

Relevant legal provisions:
EPC Art. 56, 83, 114(2)
RPBA Art. 13(1)

Relevant legal provisions (EPC 1973):
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Keyword:
"Sufficiency of disclosure - yes"
"Inventive step - yes "

Decisions cited:
T 0653/91, T 0069/07

Catchword:
-
Case Number: T 1760/09 - 3.2.05

DECISION of the Technical Board of Appeal 3.2.05
of 22 July 2011

Appellant: Ultra Technology Europe AB
(Opponent)
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Representative: Soderman, Lisbeth
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Respondent: Stora Enso Aktiebolag
(Patent Proprietor)
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Representative: Johansson, Lars-Erik
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Composition of the Board:

Chairman: W. Zellhuber
Members: H. Schram
M. J. Vogel
Summary of Facts and Submissions

I. The appellant (opponent) lodged an appeal against the interlocutory decision of the Opposition Division posted on 6 July 2009 maintaining European patent No. 0 968 329 in amended form on the basis of the main request of the respondent (patent proprietor).

The Opposition Division held that the grounds of opposition under Article 100(a) EPC (lack of inventive step, Article 56 EPC) and Article 100(b) EPC (insufficiency of disclosure, Article 83 EPC) did not prejudice the maintenance of the patent in amended form.

II. A summons to attend oral proceedings (EPO Form 3011.1), in accordance with the appellant's request which was filed with the notice of appeal dated 28 August 2009, was issued to the parties on 21 April 2011.

In the communication (EPO Form 3350) annexed to the summons the Board expressed its provisional opinion that it appeared that document D6 (see point VII below), which was filed in the proceedings before the Opposition Division after expiry of the opposition period was no more relevant than the prior art cited during the opposition period, and that the Opposition Division had correctly exercised its discretion by not admitting the document into the proceedings. The Board further stated that it appeared that documents D7 and D8, which were filed with the statement setting out the grounds of appeal, were not relevant to the question of sufficiency of disclosure and that these documents were not to be admitted into the proceedings. With respect
to substantive issues, the Board expressed its provisional opinion that the requirements of Article 83 EPC appeared to be satisfied and that the subject-matter of claim 1 as maintained appeared to involve an inventive step, Article 56 EPC.

III. Acknowledgements of receipt of the documents cited in point II above, which were signed on 26 and 27 April 2011 by the respondent and the appellant, respectively, were returned to the EPO.

IV. Oral proceedings were held before the Board of Appeal on 22 July 2011.

The representative of the respondent informed the Board on 30 May 2011 that he would not attend the oral proceedings.

Although duly summoned, the appellant did not appear at the oral proceedings. In the course of a phone call to the association of the representative of the appellant, the Board was informed that the representative was on vacation and that no one would be present on behalf of the appellant.

V. The appellant requested in writing that the decision under appeal be set aside and that the patent in suit be revoked.

The respondent requested in writing that the appeal be dismissed.
VI. Claim 1 as maintained reads as follows:

"1. Method to improve, in the production of a web which to an essential part consists of cellulosic fibres, the formation of the web material in a one or plural wire machine by furnishing ultrasound energy to a stock on a wire, which stock is led from an inlet box out onto said wire, in order to, to an essential part, disperse existing flocks in the stock, in which method ultrasound energy is furnished as ultrasound waves with frequencies between 15 and 75 kHz to the stock on the wire within a plurality of cross directional wire sections which are arranged after each other, characterised in that the ultrasound has a higher frequency within at least one section which is closer to the inlet box than a subsequent section further away from the inlet box, within which subsequent section the ultrasound has a lower frequency, such that reformation of flocks in the stock on the wire is counteracted."

VII. The documents referred to in the appeal proceedings included the following:

D1 US-A 4,735,686
D6 WO-A 95/28521
D7 EP-B 0 776 395
D8 US-A 4,484,981
VIII. The arguments of the appellant can be summarized as follows:

**Sufficiency of disclosure, Article 83 EPC**

The patent in suit did not meet the requirements of Article 83 EPC, because in the patent the ultrasonic elements were presented to be in direct contact with the wire (cf claim 11 as filed: "ultrasound elements ... in contact with the inside of the wire"). The wording "ultrasound ... elements should be positioned directly below the wire" in column 2, lines 40 and 41, of the patent in suit could only be construed as meaning "in contact with". There should be a liquid layer between the elements and the wire, since the speed of the wire was very high and the resulting friction would destroy the elements (see document D7, column 2, lines 23 to 27, and document D8, column 1, and half of column 2). Moreover, the wire would almost immediately melt. The speed of the wire was a key feature in the production of a web which the patent in suit failed to address. The distance between the ultrasound device and the wire was critical. Claim 1 as maintained referred to a plurality of cross directional sections. There was no information in the patent in suit regarding what the wire sections were "cross directional" to: to the ultrasound elements or to each other. The person skilled in the art would not know how to place the ultrasound elements based on the written description since the patent in suit did not have any drawings. In summary, the fact that the detailed description lacked reference numerals and made the serious mistake of omitting drawings, in combination
with the uncertainties and inconsistencies mentioned above, indicated an insufficiency of disclosure.

Objection of lack of inventive step, Article 56 EPC

Document D1 disclosed all the features of the preamble of claim 1 as maintained. Document D6 explained (see page 7, lines 20 to 30) that ultrasonic energy over a range of frequencies was used so that the wavelengths of different frequencies were located on different distances from the transducer and the energy was transmitted through the medium in multiples of these distances. In other words, this document taught that the frequencies were different at different distances, i.e. a first frequency at a first (closer) distance had to be different from a second frequency at a second distance further away. Document D6 thus taught that the frequency at the closer distance could be either higher or lower than the frequency further away. It did not require an inventive step by the person skilled in the art to test both alternatives and to find out which one worked better.

IX. The respondent's arguments can be summarized as follows:

Sufficiency of disclosure, Article 83 EPC

According to claim 1 as maintained the ultrasound elements were placed in such a way that ultrasound energy was furnished to the stock on the wire within a plurality of cross directional wire sections. It was common general knowledge that the cross direction referred to the direction orthogonal to the machine direction. There was no contradiction between the
expressions "directly below" and "in ... contact with" used in paragraphs [0009] and [0016] of the patent in suit, respectively. The latter was an embodiment of the former. Summarizing, the requirements of Article 83 EPC were thus satisfied.

Objection of lack of inventive step, Article 56 EPC

Document D1 was the closest prior art. This document related to a method for improving the formation of a fibre web by using steam as a source of ultrasonic vibration through implosion. The invention according to claim 1 as maintained differed from the known method in that a multi-section arrangement with higher frequency within at least one section, which was closer to the inlet box than a subsequent section further away from the inlet box.

There was no suggestion or indication in the prior art documents cited by the appellant that submitting ultrasonic energy in a multi-section arrangement having of different energies along the wire prevented flocks from reforming. The subject-matter of claim 1 as maintained thus involved an inventive step.

Reasons for the Decision

1. Non-appearance at oral proceedings without notice

While there is no obligation on a party to give notice that it will not be attending oral proceedings, the Board is of the opinion that it is a matter of courtesy for a party which has decided not to attend oral
proceedings to inform the registry as soon as possible of this decision. Had this been done in the present case, the Board could have avoided first waiting, as a matter of courtesy, for the appellant's representative to appear and then having to carry out enquiries to establish whether he had unintentionally been delayed (cf T 653/91 of 24 September 1992, point 8 of the Reasons, and T 69/07 of 10 March 2009, point 1 of the Reasons).

2. *Late-filed documents*

The (provisional) reasons given by the Board in its communication dated 21 April 2011 as to why the late-filed documents D6 to D8 did not appear relevant to the issues of sufficiency of disclosure, Article 83 EPC, and inventive step, Article 56 EPC, have not been contested by the appellant.

Exercising its discretion pursuant to Article 114(2) EPC and Article 13(1) RPBA, the Board disregards the documents D6 to D8, which were not submitted in due time.

3. *Sufficiency of disclosure, Article 83 EPC*

In claim 1 as maintained the expression "a plurality of cross directional wire sections" is used. In the judgment of the Board, the person skilled in the art should understand the term "cross directional" as meaning the direction perpendicular to the machine direction. In other words, each of the "cross directional wire sections" extend in the cross direction of the wire and are arranged one after the
other in the longitudinal (machine) direction, cf paragraph [0013] of the patent in suit.

Claim 1 as maintained requires that "ultrasound energy is furnished ... to the stock on the wire". In the judgment of the Board, the person skilled in the art would be capable of suitably placing ultrasound-energy-transmitting elements so as to carry out the method of claim 1 on the basis of the information provided in the patent in suit. In column 2, lines 39 to 45, of the patent in suit the following is stated about where to place the ultrasound-energy-transmitting elements: "In order to achieve the best effect, the ultrasound energy transmitting elements should be positioned directly below the wire or wires which follow after the inlet box or boxes of the paper or board machine. As a consequence of this positioning, the effect can also be achieved that the wire or wires are cleaned."

In the judgment of the Board, the person skilled in the art would not have any reason to construe the term "directly below", as used in the passage cited above as meaning "in direct contact with". It is true that in paragraph [0016] of the patent in suit it is stated that "[i]t is also possible to place ultrasound elements in direct contact with press felts, formation wires and/or drying wires ...", however, not for dispersing existing flock in the stock, but "in order to clean these felts and/or wires".

The invention claimed in claim 1 as maintained is therefore disclosed in a manner sufficiently clear and complete to be carried out by a person skilled in the art, Article 83 EPC.
4. Objection of lack of inventive step, Article 56 EPC

Document D1 represents the closest prior art. This document discloses a method of forming a paper web, in which condensing bubbles of steam among the fibres of the pulp produce vibrations in the pulp within the frequency range of 10 to 20 kHz, ie partly within the ultrasonic range (see column 5, lines 34 to 47).

The subject-matter of claim 1 as maintained differs from the method disclosed in this document in that the ultrasound energy "has a higher frequency within at least one section which is closer to the inlet box than a subsequent section further away from the inlet box".

Since the distinguishing feature is not known from, or suggested by, the prior art, it follows that the subject-matter of claim 1 as maintained is not obvious to the person skilled in the art, and hence involves an inventive step, Article 56 EPC.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

D. Meyfarth W. Zellhuber