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## Datasheet for the decision of 6 May 2008

T 1643/06 - 3.2.06 Case Number:

Application Number: 97950513.8

Publication Number: 0954392

IPC: B21B 1/46

Language of the proceedings: EN

Title of invention:

Process for producing a steel strip or sheet

Patentee:

Corus Staal BV

Opponent:

SMS Demag AG

Headword:

Relevant legal provisions:

EPC Art. 54(1), 56, 100b)

Keyword:

"Novelty and inventive step - yes"

Decisions cited:

Catchword:



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Boards of Appeal

Chambres de recours

Case Number: T 1643/06 - 3.2.06

DECISION
of the Technical Board of Appeal 3.2.06
of 6 May 2008

Appellant: SMS Demag AG

(Opponent) Eduard-Schloemann-Str. 4 D-40237 Düsseldorf (DE)

Representative: Valentin, Ekkehard

Patentanwälte Hemmerich & Kollegen

Hammerstrasse 2 D-57072 Siegen (DE)

Respondent: Corus Staal BV (Patent Proprietor) P.O. Box 10000

NL-1970 CA Ijmuiden (NL)

Representative: Hansen, Willem Joseph Maria

Corus Technology BV

Corus Intellectual Property Department

PO Box 10000

NL-1970 CA Ijmuiden (NL)

Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted 29 August 2006 rejecting the opposition filed against European patent No. 0954392 pursuant to Article 102(2)

EPC.

Composition of the Board:

Chairman: P. Alting Van Geusau

Members: G. Kadner

R. Menapace

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# Summary of Facts and Submissions

I. The mention of grant of European patent No. 954 392 in respect of European patent application No. 97950513.8 filed as an international application on 19 December 1997 and claiming a Dutch priority from 19 December 1996 was published on 4 August 2004 with one independent and 4 dependent claims. Granted claim 1 has the following wording:

"Process for producing a steel strip or sheet suitable

as a packaging steel in which liquid steel is cast in a continuous-casting machine (1) to form a thin plate, while making use of the casting heat, is fed through a furnace device (7), is roughed in a roughing stand (10) to a pass-over thickness and is rerolled in a finishing rolling stand (14) to form a steel strip or sheet of the desired final thickness, characterized in that to produce a ferritically rolled steel strip, the strip, the plate or a part thereof is fed without interruption at least from the furnace device (7), at speeds which essentially correspond to the speed of entry into the roughing stand (10) and the following reductions in thickness, from the roughing stand (10) to a processing device (16) which is disposed downstream of the finishing rolling stand (14), the strip coming out of the roughing stand (10) being cooled to the ferritic field at which the steel has an essentially ferritic structure whereby the ferritically rolled strip after reaching the desired final thickness is cut to portions of desired length which are coiled and wherein the total reduction in the ferritic field is less than 87%; and wherein there is no material connection between the steel in the continuous casting machine (1) on the one hand and the steel being rolled in the roughing stand (10) on the other hand."

II. Notice of opposition was filed against in which revocation of the patent on the grounds of Article 100 a) and b) EPC was requested.

By decision posted on 29 August 2006, the Opposition Division rejected the opposition since the ground of opposition according to Article 100 b) EPC was neither substantiated nor well founded, and the subject-matter of claim 1 met the requirements of novelty and inventive step when compared with the prior art documents:

D1: EP-A-0 306 076

D2: AP-A-0 666 122

D4: WO-A-97/46 332 (Article 54 (3) EPC)

E1: G. Flemming, P. Kappes, W. Rohde, L. Vogtmann:
Walzen von stranggegossenen Vorbändern und ...,
Stahl u. Eisen 108 (1988) Nr. 3, pages 99-109

E2: Chihiro Hayashi: Manufacture of deep-drawing sheet by warm-rolling - Part II, Sheet Metal Industries, November 1978, pages 1234-1244

E3: A. Sander: Progress in Hot Rolled Flat Product
Technology for Demanding Customers, I&SM, February
1995, pages 21-23

III. Notice of appeal was filed against this decision by the Appellant (Opponent) on 28 October 2006 and the appeal fee was paid on the same day. The grounds of appeal were filed on 4 January 2007.

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- IV. In a communication dated 15 January 2008 and accompanying the summons to oral proceedings the Board expressed its preliminary view that the Opposition Division's judgment appeared correct. Novelty was not in doubt, and inventive step would have to be discussed in detail during the oral proceedings.
- V. With letter dated 21 April 2008 the Appellant informed the Board that he would not appear at the oral proceedings and would agree to a decision on the basis of the state of the file.
- VI. The Appellant requested that the decision under appeal be set aside and the patent be revoked.

The Respondent (Patentee) requested that the appeal be dismissed. In case that the Board intended to deviate from the Opposition Division's decision, oral proceedings were requested.

VII. In support of its request the Appellant essentially relied upon the following submissions:

The claimed solution did not involve an inventive step since it was obvious at least by the combination of D1 with D2. D1 already disclosed a shearing device at a position just before the winding device. According to the teachings of D2 the strip was cut to portions of a desired length which then were coiled. The skilled person was free to situate the shearing apparatus shown in D2 after the finishing rolling stand thus arriving at the process of claim 1.

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El disclosed a process in which there was no material connection between the steel in the continuous casting machine and the steel being rolled in the roughing stand. That prior art in combination with E2 also made the subject-matter claimed obvious to the skilled person.

VIII. The arguments of the Respondent can be summarized as follows:

No evidence was presented in support of the view that the skilled person would select the "semi-endless" method. D2 did not provide any indication that double or multi-coil lengths were produced. Rather the alleged obviousness was based on unallowable hindsight because there was no reason for the skilled person to arrange a shearing device behind the finishing mill. Thus the process of claim 1 was not arrived at in an obvious manner.

### Reasons for the Decision

- 1. The appeal is admissible.
- 2. Article 100 b) EPC

This ground of opposition was no longer pursued.

3. Novelty

In appeal no arguments were presented by the Appellant as to why the subject-matter of claim 1 of the patent in suit lacked novelty.

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In accordance with the decision under appeal novelty is not in doubt. In fact, D4 relied upon by the Appellant in the opposition proceedings does not disclose a total reduction by rolling in the ferritic field of less than 87 %.

- 4. Inventive step
- 4.1 The Board fully concurs with the reasons given in the decision under appeal (point 5.1 to 5.5).
- The Appellant did not provide convincing arguments why the skilled person would select the "semi-endless" method which is described in D4 (page 5/6, 11). This document qualifies as prior art under Article 54 (3) EPC and should therefore be ignored for the issue of inventive step.
- 4.3 D2 relied upon by the Appellant teaches a coil-by-coil process in which a slab is cast and cut to the proper size so as to result in the proper coil weight. There is no reason to introduce this method in the process according to D1 because the latter discloses a continuous process in which the finished material is coiled and the strip is cropped periodically by shears 16.
- 4.4 Also E1 relates to a coil-by -coil process and does not disclose to cut the strip before winding it up. Rather, there it is cut to a length of 50 m corresponding to the coil weight before rolling (p. 31, right col.).
- 4.5 Hence, in absence of a teaching in the prior art to the combination of process steps claimed the process

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according to claim 1 involves an inventive step. Since the dependent claims 2 to 5 also meet the requirements of the EPC the patent can be maintained as granted.

5. In view of the state of the file and the parties' requests the Board considered oral proceedings not to be necessary or appropriate.

### Order

### For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

M. Patin P. Alting van Geusau