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**Datasheet for the decision
of 20 April 2021**

Case Number: T 0555/19 - 3.3.05

Application Number: 13744440.2

Publication Number: 2880188

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B22D11/12, B22D11/126,
B21B1/46, C22C38/02, C22C38/38

Language of the proceedings: EN

Title of invention:
METHOD FOR PRODUCING STEEL STRIP OF CARBON STEEL

Patent Proprietor:
Tata Steel Nederland Technology B.V.

Opponent:
ThyssenKrupp Steel Europe AG

Headword:
Hot connect for peritectic steel/TATA

Relevant legal provisions:
EPC Art. 54(1), 54(2)
RPBA 2020 Art. 11

Keyword:
Novelty - multiple selection - (yes)

Decisions cited:

Catchword:



Beschwerdekammern

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Case Number: T 0555/19 - 3.3.05

D E C I S I O N
of Technical Board of Appeal 3.3.05
of 20 April 2021

Appellant: Tata Steel Nederland Technology B.V.
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Representative: Group Intellectual Property Services
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Respondent: ThyssenKrupp Steel Europe AG
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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 2 January 2019
revoking European patent No. 2880188 pursuant to
Article 101(3) (b) EPC.**

Composition of the Board:

Chairman E. Bendl
Members: J. Roider
P. Guntz

Summary of Facts and Submissions

I. The appeal lies from the opposition division's decision to revoke the patent.

II. The relevant documents are:

E1: EP 2 098 600 A1

E3: EP 1 790 737 A1

III. The opposition division held that the subject-matter of claim 1 of the patent as granted lacked novelty over:

- some of the examples disclosed in E1, Table 1, in conjunction with paragraphs [0012], [0051] and [0052], and

- some of the examples disclosed in E3, Table 1, in conjunction with paragraphs [0028] and [0029].

IV. Claim 1 of the patent as granted (main request) reads:

"Method for producing steel strip of carbon steel using a thin slab caster such as a DSP (direct sheet plant) or DSC (direct sheet caster) for continuously casting the carbon steel or a conventional slab caster with a hot connect to a hot rolling installation, comprising the following steps:

providing a molten steel containing the following elements (in weight%):

0.06-0.17 C

max 3.0 Mn

0.1 -2.0 Al

max 0.01 Ca

0.1 - 0.5 Si

and optionally one or more of the following elements:

max 1.0 Cr
max 1.0 Mo
max 0.1 P
max 1.0 Cu
max 2.5 Ni
max 0.2 V
max 0.2 Ti
max 0.1 Nb
max 0.01 B

the remainder being Fe and unavoidable impurities;

*providing the molten steel to the mould of a thin slab
caster or conventional slab caster with hot connect;
casting the steel into a strand;
cutting the strand into slabs;
rolling the slabs into strips after the slabs have
undergone a temperature equalizing or reheating step."*

Method claims 2 to 8 are dependent on claim 1.

V. The appellant's (patent proprietor's) arguments can be summarised as follows:

(a) Only some of the examples in E1 disclosed a composition which fell within the claimed composition. However, the steel strips in question were prepared from an ingot (paragraph [0060]). Therefore, the examples disclosed a different process, not a hot connect. Moreover, paragraph [0052] disclosed two alternative processes, namely:
1. continuous casting immediately followed by hot rolling, and
2. the sequence of casting, cooling, reheating and hot rolling.

As such, neither contained a temperature-equalising or reheating step directly after casting, and so

novelty over E1 should be acknowledged.

(b) Only some of the examples in E3 disclosed a composition which fell within the claimed composition. However, the steel strip in question were prepared by heating to various temperatures followed by hot rolling (paragraph [0036]). The temperature before heating was room temperature. Although it was acknowledged that continuous casting (paragraph [0028]) was practically always the case today, paragraph [0029] disclosed three alternative processes:

1. the sequence of casting, cooling to room temperature, reheating and hot rolling,
2. casting, immediately followed by hot rolling, and
3. the sequence of casting, heating and hot rolling.

Provided that the casting method was a continuous casting method, the last two alternatives disclosed a hot connect. However, only the last alternative disclosed a hot connect having the features of the claim.

Therefore, even if the examples disclosed a process in which heating did not start from room temperature, it was necessary to make a selection from among two lists to obtain the claimed subject-matter.

The case should therefore be remitted to the opposition division for a decision on the remaining issue of inventive step.

VI. The respondent's (opponent's) arguments can be summarised as follows:

(a) The examples in E1 disclosed compositions which anticipated the novelty of the compositions according to claim 1. Paragraphs [0052] and [0053] disclosed methods for manufacturing the products disclosed in E1. These processes were processes according to the invention of E1, which were equivalent to that in the examples. Therefore, they applied to all examples and thus anticipated the subject-matter of claim 1.

(b) The examples in E3 disclosed compositions which anticipated the novelty of the composition according to claim 1. Indeed, the heading before paragraphs [0028] and [0029] read "Manufacturing conditions". These processes were processes according to the invention of E3, so it was immediately clear that any of the stated processes could be applied to produce any of the examples.

VII. The appellant requested that the decision under appeal be set aside and the opposition be dismissed or, alternatively, that the patent be maintained in amended form on the basis of auxiliary request 1 submitted with the grounds of appeal.

The respondent requested that the appeal be dismissed.

Reasons for the Decision

1. Main request, novelty, Article 54(1) and (2) EPC

1.1 In paragraph [0060], document E1 discloses that the steels in the example are cast to form a small ingot, which is heated to 1250°C, followed by hot rolling.

1.2 Therefore, the examples do not disclose a continuous casting method and do therefore not disclose a hot connect. The general description (E1, paragraph [0052]) discloses two alternative manufacturing processes which are different from those in the examples.

1.3 Since the argument for challenging the novelty of claim 1 involves replacing the manufacturing process in the examples with one of the manufacturing processes disclosed in paragraph [0052], it follows that the combination of steel compositions falling within the definition of claim 1 and produced by a method as claimed is not directly and unambiguously disclosed.

The novelty of the subject-matter of claim 1 must be acknowledged for that reason alone.

Moreover, the manufacturing process in paragraph [0052], which discloses a hot connect, does not disclose a reheating or a temperature-equalising step. Therefore, even if the manufacturing process in the examples were replaced with the one described in the general part, the subject-matter of claim 1 would still not be obtained.

The subject-matter of claim 1 is thus novel over E1.

1.4 Additionally, some of the examples in E3 disclose a steel composition falling within the definition of the steel composition according to claim 1 at issue.

1.5 For the examples, document E3 does not disclose a specific manufacturing method prior to the heating step (paragraph [0036]). The initial temperature of the slabs prior to heating is not disclosed in the examples, so they do not directly and unambiguously

disclose a hot connect.

- 1.6 The general description (E3, paragraphs [0028] and [0029]) discloses several manufacturing processes, including continuous casting followed by a heating and a hot rolling step, i.e. a hot connect within the meaning of the subject-matter of claim 1.
- 1.7 Any argument for challenging the novelty of claim 1 would thus require a first specific selection from among the numerous steel compositions in Table 1 and a second specific selection from among the three alternative processes disclosed in paragraphs [0028] and [0029].
- 1.8 Therefore, D3 does not directly and unambiguously disclose the subject-matter of claim 1 either.
- 1.9 For these reasons, the subject-matter of claim 1 of the main request is novel over E1 and E3.
2. Remittal to the opposition division for further prosecution
 - 2.1 The decision under appeal does not contain any arguments as to inventive step, and the statement of grounds of appeal only contains arguments addressing the novelty of the subject-matter of the main request and of auxiliary request 1.
The appellant requested that the case be remitted to the opposition division for a decision on the remaining issue of inventive step.
 - 2.2 The respondent's reply filed on 6 September 2019 only contained objections and the related arguments

addressing the novelty of the main request and of auxiliary request 1.

- 2.3 No further substantive submissions were filed.
- 2.4 The opposition was also based on the grounds of Article 100(a) EPC in combination with Article 56 EPC.
- 2.5 When the grounds of appeal and the reply were filed, the RPBA 2007 were in force. Therefore, the parties had the legitimate expectation that the case would be remitted to the opposition division for further prosecution.
- 2.6 Article 111(1) EPC stipulates the board's liberty to either continue examination of a patent application or remit the case to the examining division for further prosecution. Although Article 11 RPBA 2020 further states that the board is not to remit a case for further prosecution unless special reasons present themselves for doing so, this provision has to be read in conjunction with Article 12(2) RPBA 2020, which emphasises that the primary object of the appeal proceedings is to review the decision under appeal in a judicial manner.
- 2.7 In the case in hand, although an objection for lack of inventive step was raised in the opposition phase, neither party made any comments on appeal. Therefore, a judicial review in this respect is not possible. Moreover, it is evident that the discussion of inventive step (or the lack of inventive step) had not yet come to a conclusion. It does not appear equitable to terminate the proceedings without remittal to the opposition division otherwise the patent would be maintained in unamended form without any instance

having reviewed the issue of inventive step, contrary to both parties' expectations.

- 2.8 Consequently, in view of the specific situation, the board is of the opinion that special reasons exist which justify remitting the case to the opposition division (Article 11 RPBA 2020), as explicitly requested by the appellant.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the opposition division for further prosecution.

The Registrar:

The Chairman:



C. Vodz

E. Bendl

Decision electronically authenticated