BESCHWERDEKAMMERN DES EUROPÄISCHEN PATENTAMTS

BOARDS OF APPEAL OF THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPEEN DES BREVETS

Internal distribution code:
(A) [ ] Publication in OJ
(B) [ ] To Chairmen and Members
(C) [ ] To Chairmen
(D) [X] No distribution

Datasheet for the decision of 10 April 2008

Case Number: T 1445/06 - 3.2.07

Application Number: 00201306.8

Publication Number: 1048425

IPC: B28B 3/20

Language of the proceedings: EN

Title of invention:
Process for forming multi-coloured porcellainized ceramic stone tiles by extrusion

Applicant:
SACMI COOPERATIVA MECCANICI IMOLA SOCIETA' COOPERATIVA

Headword:
-

Relevant legal provisions:
EPC Art. 56, 113, 116
RPBA Art. 12(3)

Keyword:
"Inventive step (no)"

Decisions cited:
T 0564/89, T 0939/92

Catchword:
-

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 1445/06 - 3.2.07

D E C I S I O N
of the Technical Board of Appeal 3.2.07
of 10 April 2008

Appellant: SACMI COOPERATIVA MECCANICI IMOLA SOCIETA' COOPERATIVA
17/A, via Selice Provinciale
I-40026 Imola (Bologna) (IT)

Representative: Corradini, Corrado
Studio Ing. C. CORRADINI & C. S.r.l.
4, Via Dante Alighieri
I-42100 Reggio Emilia (IT)

Decision under appeal: **Decision of the Examining Division of the European Patent Office posted 31 March 2006 refusing European application No. 00201306.8 pursuant to Article 97(1) EPC.**

Composition of the Board:

Chairman: H. Meinders
Members: K. Poalas
I. Beckedorf

Summary of Facts and Submissions

I. The appellant (applicant) lodged an appeal against the decision of the Examining Division refusing European patent application 00 201 306.8.

II. In its decision, the Examining Division held that the subject-matter of each of the independent claims 1 and 10 filed with letter of 3 October 2005 lacks inventive step in view of at least the combination of the teachings of documents D1 (US 4 292 359 A) and D2 (DE 2 013 856 A).

III. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of independent claim 10 filed with the letter of 3 October 2005 and dependent claims 11 to 18 filed with letter of 9 April 2004.

IV. Claim 10 reads as follows:

"A plant for forming tiles or tile accessories by extrusion, comprising:
an extruder (6) comprising a screw (7), a pressure cone (8) and a die (13),
means for feeding said extruder (6) with at least two porcellainized ceramic stone pastes of different colour, characterised by comprising material flow deviator means (9, 10, 11, 12) positioned between said screw (7) and said die (13)".

V. The appellant argued as follows:

D2 does not show any screw extruder at all, nor

provides for screw extruders before its deviator means 27. This has the consequence that, literally taken, the statement in the grounds of the impugned decision (page 5, third paragraph) that: "the feature of material flow deviator means positioned between said screw and said die.., is described in document DE 2 013 856", is not correct.

The skilled person, considering the plant of Dl as the starting point and the technical problem of obtaining a final product consisting of tiles comprising veining which extends as volutes wrapping about themselves, or as striated strains comprising different coloured curls would not have considered the teaching of D2, for the following reasons:

First, the final product of D2 is not an extruded web of paste that can be divided into tiles, but it is a cylindrically formed material (Stränge 37, 38) that only in cross section shows a so-called "Büffelhorn" pattern.

Moreover, the material subjected to extrusion in D2 consists of several layers of different characteristics helically wound, which must maintain their ordered disposition before being subjected to the action of the deviator means.

Should the extruder of D2 comprise a screw before its deviator means, said screw would destroy the ordered helically wound layers of D2.

Therefore, the teaching of D2 is meaningless in respect of the device of Dl in view of the technical problem

solved by the present invention.

A combination of the teachings of D1 and D2 is based on an "ex post facto" analysis contrary to the decisions T 564/89 (not published in OJ EPO) and T 939/92 (OJ EPO 1996, 309) in which is stated that what the skilled person would have done largely depends on the technical results he/she had set out to achieve.

Reasons for the decision

1. This decision is based upon the written submissions of the appellant in the current appeal proceedings and with due consideration of the entire content of the file.

Subject to Articles 113 and 116 EPC the Board may decide the case at any time after filing of the statement of grounds of appeal (Article 12 (3) RPBA). The statement of grounds of appeal was filed on 27 July 2006 setting out in detail why the appellant considers the decision under appeal to be incorrect and why the patent should be granted. The appellant has not requested oral proceedings and the Board does not regard the appointment of oral proceedings to be necessary.

2. D1 discloses a plant for forming tiles or tile accessories by extrusion, comprising:
an extruder 20 comprising a screw, a pressure cone and a die 36,
means 18, 54 capable for feeding said extruder 20 with at least two porcellainized ceramic stone pastes of

different colour, see column 1, lines 31 - 55; claim 1, step b); figures 1 and 2.

This fact was not disputed by the appellant.

The subject-matter of claim 10 differs from the plant known from D1 in that material flow deviator means are positioned between said screw and said die.

This has the effect of a natural appearance, e.g. a marble type decoration in the final tile or tile accessory.

3. The problem to be solved by the present invention can therefore be regarded as to modify the colour pattern of a paste in order to give to it a natural appearance, e.g. a marble type decoration, see also page 1, line 29 to page 2, line 9 of the originally filed application.

The person skilled in the art seeking to solve the above-mentioned problem would take into consideration the teaching of D2 as D2 is also directed to a device for manufacturing products by extrusion through a die. The products of this extrusion have at least two different colours and a natural appearance similar to buffalo horn.

4. More specifically, according to D2 a paste material 13 coming out from the press unit 1 is wound to form a roll 16. The roll 16 is then introduced into the extruder 18. After that the piston 19 pushes the roll 16 towards the die 40. The paste product exits the die 40 of the extruder 18 in the form of two separate material flows 37 and 38. A prior material flow

deviator means in the form of the rotating vane 27, which is positioned in the interior of the tube 25 between the pressing part of the extruder, i.e. the piston 19 and the die 40 causes that the paste product has a natural colour variation appearance similar to that of buffalo horn. Buffalo horn is characterized by veins extending as striated stains comprising different coloured curls.

The person skilled in the art derives from D2 the teaching that a material flow deviator means positioned in the interior of an extruder between the pressing part and the die forming the paste product gives to a paste product comprising material of two different colours a natural appearance.

Accordingly, the person skilled in the art starting from the plant of D1 and led by said teaching of D2, would position a vane as material flow deviator means, as disclosed in D2 with the reference 27, between the pressing part of the extruder, i.e. the screw 34 and the extrusion head 36 in order to give natural appearance to the paste product passing there through, without exercising an inventive activity.

5. The appellant argued that the final product of D2 is not an extruded web of paste that can be divided into tiles, as the material subjected to extrusion in D2 consists of several layers of different characteristics helically wound, and that D2 does not show any screw extruder at all, nor provides for screw extruders positioned before its deviator means. Therefore, the teaching of D2 would be meaningless in respect of the device of Dl in view of the technical problem solved by

the present invention.

6. The Board cannot follow these arguments for the following reasons:

6.1 Firstly, the object of D2 is to provide an improved apparatus for manufacturing different paste products having the natural design of buffalo horn, see first complete paragraph on page 3 of D2. This is achieved by extruding rods of paste material, having in the longitudinal direction layers with different colouring, through a die. Before the die a vane 27 is mounted rotatable in order to let through layers of paste material one after the other. The paste material downstream of the rotating vane is then divided by the die 40 into rods and subsequently brought into its final form and/or hardened, see second complete paragraph on page 3 of D2. This means that in a final step the extruded paste of D2 can be divided into any kind of form.

Not only that, but the formation of the tiles, in any case, takes place by passing the paste material through the extrusion head 36 of the extruder 20 known from D1, so that the fact that the production of tiles is as such not mentioned as the final product of the paste material used in D2 is of no consequence.

6.2 Secondly, the fact that the material subjected to extrusion in D2 consists of several layers of different characteristics helically wound has no influence on the process of extrusion via the vane divider itself as the different materials are collected together after the vane, completely filling the cross-section of the

extruder tube, see page 3, second complete paragraph.

6.3 Thirdly, it is obvious that since D2 does not involve a screw as the pressing part it also does not show material flow deviator means positioned between a screw and a die. On the other hand, it is well known to the person skilled in this art that in an extruder there is always a pressing part pressing the material towards the die. Said pressing part can be either a piston or a screw. For the skilled person these two pressing parts are, depending on the circumstances, interchangeable.

The Board notes further that neither in the general part of the description nor in the claims is there in D2 a specific mention of the type of pressing part of the extruder. Only the part of the description referring to the specific embodiment of figures 1 and 2 is there a reference to the piston 19, see page 8, first complete paragraph. The Board considers therefore that the teaching of D2 consists in the information that for producing a paste material with two different colours having a natural appearance a material flow deviator means has to be positioned downstream from the pressing part of an extruder, independently of the type of the pressing part itself.

6.4 The appellant further argued that should the extruder of D2 comprise a screw before its deviator means, said screw would destroy the ordered layers of D2.

The Board notes that in its reasoning regarding the lack of inventive step the deviator vane of D2 would be incorporated into the extruder 20 of D1 and not the other way around as argued by the appellant, so that

the plant started from would be the one known from D1.

6.5 The appellant finally argued that a combination of the teachings of D1 and D2 is based on an "ex post facto" analysis and goes contrary to the decisions T 564/89 (*supra*) and T 939/92 (*supra*).

The Board cannot agree with said argument for the following reasons:

In T 564/89 the deciding Board found that either the differentiating features of claim 1 over the closest prior art document were not present in the prior art documents taken into consideration or a specific effect achieved through said differentiating features was not foreshadowed by said documents.

In T 939/92 the deciding Board criticized the fact that the examining division selected a specific detail out of its context within the general teaching of the prior art documents and generalized it using the findings of the application in question.

The situation in the present case is different. The differentiating feature of claim 10 over the closest prior art document D1, namely positioning material flow deviator means within an extruder after the pressing part and before the die, is not only actually present in D2, but is also there in order to give to a paste material with two different colours, pressed through said die, a natural appearance. Neither is there a situation that a specific detail is taken out of its context and is generalized; the vane as material flow deviator means is taken for what it actually is and for

the effect it actually produces. The Board therefore considers that there is no question of an ex-post-facto approach.

For the above-mentioned reasons the Board concludes that the findings of the decisions T 564/89 and T 939/92 are not applicable in the present case.

Accordingly, the Board considers that the subject-matter of claim 10 does not involve an inventive step (Article 56 EPC), in agreement with the decision under appeal.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

G. Nachtigall H. Meinders