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**Datasheet for the decision
of 28 October 2009**

Case Number: T 0473/08 - 3.2.06

Application Number: 01900189.0

Publication Number: 1244835

IPC: D06B 5/16

Language of the proceedings: EN

Title of invention:
Producing dyed thread

Patentee:
J & P Coats Limited

Opponent:
Amann & Söhne GmbH & Co.

Headword:

-

Relevant legal provisions:
EPC Art. 52, 54, 56

Relevant legal provisions (EPC 1973):

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Keyword:
"Patentable invention - technical features (yes)"
"Novelty (yes)"
"Inventive step (yes)"

Decisions cited:

-

Catchword:

-



Case Number: T 0473/08 - 3.2.06

D E C I S I O N
of the Technical Board of Appeal 3.2.06
of 28 October 2009

Appellant: Amann & Söhne GmbH & Co.
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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
4 February 2008 concerning maintenance of
European patent No. 1244835 in amended form.

Composition of the Board:

Chairman: P. Alting van Geusau
Members: G. de Crignis
K. Garnett

Summary of Facts and Submissions

- I. European Patent No. 1 244 835, granted on application No. 01 900 189.0, was maintained in amended form by the decision of the opposition division posted on 4 February 2008.

Claim 1 reads as follows:

"A method for manufacturing packages of dyed thread, comprising:

producing packages (11) of undyed thread on user package supports (12, 61) which are dye permeable; the packages being wound so as to be suitable both for dyeing and orderly unwinding in use; characterised in that undyed thread is held in store on the user package supports (12; 61) and, when a batch of a particular colour is required, a supply of packages (11) is withdrawn from store, dyed and dried in order to produce user packages of dyed thread."

- II. The opposition division did not admit a new ground of opposition raised during the oral proceedings which concerned the alleged lack of technical character (Article 52(1) EPC since it did not consider it *prima facie* valid. Moreover it held that the subject-matter of claim 1 was novel (Article 54 EPC) over the disclosure in

E3 A. Graber, "Logistik in der Garnfärberei", Vortrag zum ITV-Kolloquium "Transport und Handhabung in der Textilindustrie", published in "Melliand Textilberichte" 12/1992, S. 995-968.

Furthermore, the subject-matter of claim 1 was considered to involve an inventive step (Article 56 EPC) with regard to the disclosures of either E3 in combination of the teachings of E1 GB A 1 095 343 or when starting from E1 and combining it with the teaching of E3.

III. The appellant (opponent) filed a notice of appeal against this decision on 1 March 2008, including a request for oral proceedings, and paid the appeal fee on the same day. On 3 June 2008 the statement of grounds of appeal was filed. The appellant requested the revocation of the patent or remittal of the case back to the opposition division, arguing that there had been a failure to check whether the amendments contravened the requirements of the EPC. The term "user package" did not represent a *terminus technicus* in the textile industry and thus was not clear and could not necessarily be linked to an end user, whoever this might be. In support of this argument, the following documents were filed:

- E10 Textile Dictionary, Textiltechnisches Wörterbuch, VDI Verlag GmbH, 2. Aufl. 1990, S. 579, 371
- E11 Ernst; Wörterbuch der industriellen Technik, Band II, EN-DE, 5. Aufl. 1985, S. 1356
- E12 Internetdatenbank "LEO" "package"
- E13 Internetdatenbank "LEO" "user"
- E14 Internetdatenbank "LEO" "user package"
- E15 Datenbank "depatinet" "user package thread"
- E16 Datenbank "depatinet" "user package yarn"
- E17 Datenbank "depatinet" "user package textile"

- E18 H. K. Rouette, "Lexikon für Textilveredelung",
Laumann-Verlag 1995, Bd. 3, S. 2386
- E19 M. Peter, H. K. Rouette, Grundlagen der
Textilveredelung", Deutscher Fachverlag 1989,
S. 910, 926
- E20 M. Peter, "Grundlagen der Textilveredelung"
Deutscher Fachverlag 1979, S. 361, 376
- E21 M. Peter, "Grundlagen der Textilveredelung"
Deutscher Fachverlag 1979, S. 142, 143
- E22 T 301/87
- E23 Bild 1 aus E3 mit Markierungen.

The amended subject-matter of claim 1 of the patent in suit did not meet the requirements of Articles 84, 83 and/or 52 EPC. A way of carrying out the invention was not specified and thus the requirements of Article 83 EPC were not met. Neither the form of support nor how to wind the yarn upon the support was specified. Concerning the alleged inventive concept, E1 represented a suitable starting point and disclosed a dyeing process based upon a support which could be directly reused. The problem to be solved was to enable a just-in-time production. This was not a technical problem but related to logistical organisation. Such problems were excluded from patentability by Article 52 EPC. Anyhow, the subject-matter of claim 1 did not involve an inventive step (Article 56 EPC) when starting from the teaching of E1 and taking into account the disclosure of E3, which referred to just-in-time production and showed in its Figure 1 the possibility of drying the yarn directly on the support which was used for dyeing and subsequent delivery to the transport and storage unit.

IV. In a communication dated 28 May 2009 accompanying the summons to oral proceedings the board pointed out that a discretionary decision of the department of first instance can be overruled only if the decision was based on wrong principles or was unreasonable, which did not appear to be the case here. The subject-matter of claim 1 of the main request appeared to be novel over the disclosure of either E1 or E3 (Article 54 EPC). The problem to be solved was specified by all parties as being related to the provision of a "just-in-time" production.

V. Oral proceedings were held on 28 October 2009.

With its letter of 9 September 2009 the appellant announced that it withdrew the request for oral proceedings but maintained its request to set aside the decision under appeal and to revoke the patent. No representative for the appellant (opponent) appeared at the oral proceedings.

The respondent (patent proprietor) requested that the appeal be dismissed.

VI. In support of its request the respondent argued essentially as follows:

The term "user package" was clear. The subject-matter of claim 1 concerned a technical process. Whether the problem to be solved was technical or not was irrelevant as long as the solution was technical. E1 should be considered as the closest prior art. It referred to a similar process for dyeing threads on single yarn supports. The problem to be solved was

related to reducing costs and particularly to a just-in-time production. It was correct that E3 in its Section 3.2 discussed just-in-time production. However, the means for just-in-time production specified there referred only to the relevance and advantages of computer-based organisation and did not refer to the claimed subject-matter. Therefore, the subject-matter of claim 1 involved an inventive step.

Reasons for the Decision

1. The appeal is admissible.
2. *Article 83 EPC*

The objection in this respect is not related to the amended feature ("and dried") and thus represents a new ground of opposition. A new ground can only be admitted with the consent of the patent proprietor, which was not given. Therefore, in accordance with G 1/95, this objection is not admissible.

3. *Formal requirements of the subject-matter of claim 1 concerning the term "user package"*

No definition of this term is present in the description of the patent in suit. The opposition division considered a user package to be a package for end use which will be directly used in the machine (see point 5 of the appealed decision). Although such use is certainly within the scope of this term, the Board sees no reason to limit the term in this way. Any application of the package can be considered as falling

within the scope of this term and as being relevant in this regard. However, such a broad interpretation does not give rise to ambiguity. The documents E10 to E23 which were filed in this respect do not contradict such a broad interpretation. Therefore, the subject-matter of claim 1 is clear and concise and the requirements of Article 84 EPC are met.

4. *Article 52 EPC*

4.1 The ground of opposition under Article 52 EPC was not admitted into the proceedings by the Opposition Division and no grounds have been advanced suggesting that this discretionary decision can be validly attacked. Further, the respondent did not consent to this new ground being admitted; see G 7/95. Nevertheless, for the sake of completeness, the Board would make the following observations.

4.2 The subject-matter of claim 1 is a method for manufacturing packages of dyed thread and process steps of the production method are listed. The appellant did not argue that the manufacturing and handling of such packages would not be technical. The position of the appellant was that the problem of just-in-time production was not a technical problem but a logistical one. However, there is no requirement in the EPC that only technical problems can lead to patentable subject-matter; a non-technical problem can have a technical solution. No counter-argument in this respect was advanced.

4.3 The Board notes that the claimed steps include physical and mechanical movement of the package supports with

regard to the size of the batch and the fact that the package supports are to be stored when yarn is already wound on them. The steps referred to in the characterising portion include storing and sizing of the batch, dyeing and drying. Therefore, the technical nature of the solution is unquestionable.

- 4.4 Accordingly, the claimed subject-matter has a technical character; it does not relate to a discovery, scientific theory or mathematical method or to any other of the exceptions defined in Article 52(2) EPC. Only subject-matter and activities that represent purely abstract concepts devoid of any technical implications are to be regarded as non-inventions within the meaning of Article 52 EPC (T 258/03, OJ EPO 2004, 575). This is not the case here.

5. *Novelty*

- 5.1 E1 discloses a process for dyeing polymer threads, wherein the threads are wound to form a single unit-cheese on a frusto-conical perforated tube of plastics material. The threads are so wound that they can be subjected to a dyeing operation (p. 1, l. 43-55). After the dyeing, the units can be passed on directly to the textile processing stage. Accordingly, rewinding processes are avoided (p. 2, l. 18-27).

E1 does not disclose the features of claim 1 of the patent in suit according to which the undyed thread is held in store on the user package supports and that a multiplicity of user supports is to be provided. Thus the combination of the features of claim 1 is not known from this prior art.

5.2 E3 discloses the logistics for the dyeing of yarn. In section 1 it makes it clear that it is concerned with the material flow in a production process concerning great numbers of yarn bobbins. In section 2 it discusses the diverse possibilities which are known in the prior art, also *via* schematic flow diagrams. In its sections 3 and 4 transport, storage, and handling of the bobbins are referred to. The final conclusions reached in E3 refer to the following matters:

- (a) when planning a new dyeing factory, a concept for transportation should be set up;
- (b) internal transport represents a significant factor of rationalisation in larger dyeing factories;
- (c) as far as possible standardized units and systems should be used;
- (d) Euro-pallets with intermediate stages allow such standardized storage and transport;
- (e) the provision of automatic handling needs control;
- (f) robot-controlled dyeing is dependent on various systems and is difficult to organize;
- (g) fully automated handling of dyeing apparatus is only partly economical;
- (h) automation should be related to the extent which is sensible and economical.

E3 does not say specifically whether the undyed thread is held in store on the user package support or specify which individual package units should be used. The most simplified process route which is possible according to the flow diagram shown in Figure 2 suggests either the rewinding of the bobbin before delivery or its direct delivery. However, in the absence of any specific disclosure about individual packages or batches of packages, the same feature identified above as

distinguishing the claimed subject-matter from the disclosure of E1 also distinguishes the claimed subject-matter from the disclosure of E3.

5.3 Hence, the subject-matter of claim 1 is novel (Article 54 EPC).

6. *Inventive step*

6.1 For the assessment of inventive step, E1 represents the closest prior art. E3 is not concerned with the manufacturing process itself but with the logistics and degree of automation. Therefore, E1 better represents the starting point when assessing inventive step.

6.2 E1 discloses a method of manufacturing a dyed thread unit as set out under point 5.1 above and points to the advantageous effect of avoiding rewinding processes by providing a bobbin (described as a cheese) which can be used for dyeing as well as for further textile processing stages such as warping, weaving or knitting. The feature distinguishing the claimed subject-matter from the disclosure of E1 is the holding of the undyed thread on the suitable bobbins in store and the production of the dyed packages upon request, as well as the provision of a whole batch or a multiplicity of such dyed bobbins.

6.3 The patent in suit refers to the fact that each winding operation is cost intensive and requires extra work (paragraph [0005]). In principle, the concept of just-in-time production was already known (paragraph [0020]). Such a concept provides the final unit exactly at the time of desired delivery (paragraph [0026]). Thus, the

problem to be solved underlying claim 1 is to enable a just-in-time process for specific bobbins by avoiding any further storage action during the in-house process. The solution according to claim 1 is that the batches are only dyed on demand by holding the undyed thread in store on bobbins which are then capable of being processed in the dyeing operation as well as in any further process step.

6.4 E3 discloses many possibilities for optimizing the logistics and the degree of automation when dyeing yarn. However, the kind of bobbin, the number of rewinding steps and the storage of the dyed batches is not seen as a particular issue. There is no disclosure of a single specific order of the process steps but rather a flow diagram (Figure 1) represents the various possibilities in this respect. With regard to just-in-time production, E3 refers explicitly in its section 3 to the use of Euro-pallets, to central storage and to the control of the input and output of the process via a computer based system. Accordingly, the just-in-time concepts disclosed there are not related to the physical characteristics of the individual packages when held in storage. Any packages would be suitable. Therefore, the skilled person would be led to computer- and transport-related solutions. The adaptation of the individual packages referred to in E1 to an automated system or to Euro-pallets is however not the issue of the patent in suit.

6.5 Accordingly, - when starting from E1 - and desiring to use the individual bobbins of E1 in a just-in-time delivery, the skilled person might be led to apply the internal transport concept described in some detail in

paragraph 3.2 in E3. However, such a combination of teachings is principally directed to achieve advantages in relation to reduction of staff and flexibility in production and, moreover, since rewinding is specifically mentioned, it does not give a hint to the solution as claimed. The procedures derivable from Bild 1 and Bild 2 on page 965 of E3 are not specific enough in relation to individual bobbins and as regards any conclusion in the direction of the claimed solution can be regarded as a matter of hindsight.

6.6 Accordingly, the Board concludes that starting from E1 and trying to solve the problem of a just-in-time process in combination with the avoidance of any further storage or rewinding during the in-house process, the teaching of E3 would not lead the skilled person to the subject-matter of claim 1 without the use of an inventive step (Article 56 EPC).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar

The Chairman

M. Patin

P. Alting van Geusau