| BESCHWERDEKAMMERN | BOARDS OF APPEAL OF | CHAMBRES DE RECOURS |
| :--- | :--- | :--- |
| DES EUROPÄISCHEN | THE EUROPEAN PATENT | DE L'OFFICE EUROPEEN |
| PATENTAMTS | OFFICE | 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 15 July 2011

```
Case Number: T 1933/09 - 3.2.06
Application Number: 99955598.0
Publication Number: }115316
IPC: D01G 15/88
Language of the proceedings: EN
Title of invention:
Card wire, especially for doffers and workers
```


## Patentee:

```
Commonwealth scientific and industrial research
```

Commonwealth scientific and industrial research
Opponent:
Graf + Cie AG

```
Headword:
Relevant legal provisions:
Relevant legal provisions (EPC 1973):
EPC Art. 54, 56
Keyword:
"Novelty - yes"
"Inventive step - yes"
Decisions cited:
Catchword:
Europäisches
```

Case Number: T 1933/09 - 3.2.06

```
```

    D E C I S I O N
    of the Technical Board of Appeal 3.2.06
of 15 July }201

```
\begin{tabular}{|c|c|}
\hline \begin{tabular}{l}
Appellant: \\
(Opponent)
\end{tabular} & \[
\begin{aligned}
& \text { Graf + Cie AG } \\
& \text { Bildaustrasse } 6 \\
& \text { CH-8640 Rapperswil }
\end{aligned}
\] \\
\hline Representative: & \[
\begin{aligned}
& \text { Ruff, Wilhelm, Beier, Dauster } \\
& \text { Postfach } 104036 \\
& \text { D-70035 Stuttgart }
\end{aligned}
\] \\
\hline \begin{tabular}{l}
Respondent: \\
(Patent Proprietor)
\end{tabular} & \begin{tabular}{l}
COMMONWEALTH SCIENTIFIC AND INDUSTRIAL \\
RESEARCH ORGANISATION \\
Limestone Avenue \\
Campbell, ACT 2612 (AU)
\end{tabular} \\
\hline Representative: & \begin{tabular}{l}
Wraige, David Leslie Charles \\
Elkington and Fife LLP \\
Prospect House \\
8 Pembroke Road \\
Sevenoaks \\
Kent TN13 1XR (GB)
\end{tabular} \\
\hline Decision under appeal: & Decision of the Opposition Division of the European Patent Office posted 19 June 2009 rejecting the opposition filed against European patent No. 1153162 pursuant to Article 102 (2) EPC. \\
\hline
\end{tabular}

\section*{Composition of the Board:}
\begin{tabular}{ll} 
Chairman: & K. Garnett \\
Members: & G. Kadner \\
& G. de Crignis
\end{tabular}

\section*{Summary of Facts and Submissions}
I. The mention of grant of European patent No. 1153 162, with one claim, on the basis of European patent application No. 99955598.0 filed on 28 October 1999 and claiming an Australian priority from 30 October 1998, was published on 14 March 2007.

Claim 1 of the patent as granted reads as follows:
"Card clothing comprising a strip of a profile wire having a base (113) and a plurality of longitudinally aligned teeth (110) each having an overhanging tip (111) and a re-entry edge-face under the overhanging tip (111);
characterised in that the edge-face of each tooth (110) includes at least one undercut edge-segment (114) spaced along the edge-face from the tip (111), which undercut includes at least a portion that is substantially parallel to the longitudinal dimension of the profile wire thereby increasing the retention of fibers by said edge-face during carding."
II. Notice of opposition, in which revocation of the patent on the grounds of Article \(100(a)\) EPC 1973 was requested, was filed against the granted patent by Graf + CIE AG.

By interlocutory decision posted on 19 June 2009, the opposition division rejected the opposition. The opposition division held that the patent and the invention to which it related met the requirements of the EPC.
III. Notice of appeal was filed against this decision by the appellant (opponent) on 17 August 2009, and the appeal fee was paid on the same day. The grounds of appeal were filed on 9 October 2009.
IV. In a communication accompanying the summons to oral proceedings the board expressed its preliminary view that the term "undercut" was technically clear in the light of the description. The board also indicated that it interpreted the feature "substantially parallel" differently than the opposition division, particularly having regard to claim 7 and figure 6.
V. Oral proceedings were held on 15 July 2011 during which the respondent filed a new first auxiliary request in which, with respect to the main request (patent as granted), claim 7, figure 6 and the respective parts of the description had now been deleted.

The following documents were cited as relevant prior art:

D1: US-A-5 581848
D2: DE-A-44 36378 (family member of D1)
D3: JP-U-56-98875; D3a: English translation of D3
D4: US-A-5 123529

The appellant (opponent) requested that the decision under appeal be set aside and that the European patent No. 1153162 be revoked.

The respondent (patentee) requested that the appeal be dismissed or that the patent be maintained on the basis
of the first auxiliary request filed during the oral proceedings.
VI. The arguments of the appellant can be summarized as follows:

The subject-matter of granted claim 1 did not meet the requirement of novelty, having regard to D1. If the embodiments of claim 7 and figure 6 were indeed part of the invention, the features "undercut edge segment" and "substantially parallel" had to be interpreted in the light of these embodiments, thus leading to a lack of novelty. D1 also disclosed a profile having a scallop recess extending away from the overhanging tip of the tooth and having a substantially parallel portion.

In respect of the first auxiliary request, starting from D1 as closest prior art, the subject-matter of claim 1 was obvious. The skilled person having experience in the field of carding would explore suitable angles to achieve optimal retention of the fibres when they arrive at the re-entry face, and would be led to an angle which was "substantially parallel" to the wire base.

D3 also disclosed an embodiment in Figure 8 which indicated an angle of the undercut portion. The skilled person following the teachings of \(D 3\) would select suitable angles in the same manner as when starting form D1. The card clothing according to claim 1 consequently did not involve an inventive step.
VII. The respondent argued that the skilled person would without any difficulty determine the scope of

\begin{abstract}
"substantially parallel" in the light of the description as defining the desired technical effect of increasing the retention of fibres. The embodiment of claim 7 and figure 6 had a substantially parallel portion at least defined by a tangent to the notch or scallop recess, which tangent was parallel to the basis of the wire.
\end{abstract}

As regards the presence in \(D 1\) of an undercut edgesegment within the meaning of claim 1, only the lower section 11 of the leading edge could be identified as such but this did not have a substantially parallel portion. The upper section 10 having a substantially parallel portion was not spaced along the edge-face from the tip. Therefore the subject-matter of claim 1 was novel over D1.

After deletion of claim 7 and figure 6 in the first auxiliary request it was clear that curved lines could no longer be regarded as containing a portion which was "substantially parallel" to anything else. If taken as closest prior art, D1 did not disclose a card clothing because it related to combing. The front edges of the teeth were defined by two sickle-shaped bights, and no parallel portion was shown. Only the direction of movement of the tip of the tooth was parallel to the combing direction. Also figure 8 of \(D 3\) did not give any indication towards the claimed invention because there in no undercut was shown. Rather, the leading edges of the teeth were provided with projections, the angles of which were clearly not substantially parallel to the longitudinal dimension of the wire.

\section*{Reasons for the Decision}
1. The appeal is admissible.
2. Main request (Article 54 EPC 1973)
2.1 Claim 1 comprises the feature that "the edge-face of each tooth (110) includes at least one undercut edgesegment (114) spaced along the edge-face from the tip (111), which undercut includes at least a portion that is substantially parallel to the longitudinal dimension of the profile wire". Regarding claim 7, in which the undercut edge-segment is provided by a notch or scallop recess as shown in Figure 6, there is no straight line edge segment or portion which can define any particular direction.
2.2 The respondent argued that a tangent could define such a direction. However, a tangent has only one point in common with the curved line on which it stands and can be situated at any point along the curve.
2.3 The respondent further argued that the term "undercut edge-segment (114) spaced along the edge-face from the tip" meant that the undercut would start at a point removed from the tip. However, the wording of the claim is not unambiguous in this respect and does not exclude the possibility that the recess can begin at the tip.
2.4 After having thus clarified the meaning of claim 1, D1 discloses a card clothing comprising a strip of a profile wire having a base 2 and a plurality of longitudinally aligned teeth 3 each such tooth having an overhanging tip 6 and a re-entry edge-face 10, 11
under the overhanging tip 6. The edge-face of each tooth includes an undercut edge-segment 10 spaced along the edge-face from the tip 6, which undercut includes at least a portion 9 that is substantially parallel to the longitudinal dimension of the profile wire (col. 1, line 9; col. 2, lines 37 to 44; Fig. 1). The fact that the retention of fibres by said edge-face during carding may thereby be increased does not define a structural feature.
2.5 Therefore, since D1 discloses all features of claim 1, the subject-matter of claim 1 does not meet the requirement of novelty within the meaning of Article 54 EPC 1973.
3. Auxiliary request (Article 54, 56 EPC 1973)
3.1 Novelty
3.1.1 With the deletion of Claim 7, figure 6 and the respective part of the description (paragraph [0028]) the basis for the assessment of the meaning of "substantially parallel" (see point 2.1 above) has changed. The Board considers that there is no longer room for any interpretation of the claim other than that the portion of the undercut which is required to be parallel to the longitudinal direction of the profile is a straight line portion.
3.1.2 The edge-face of the saw tooth fitting disclosed in D1 is defined by two sickle shaped bights and does not have a straight line portion defining a direction which is parallel or substantially parallel to another
straight line. For this reason the feature in question is not disclosed in D1.
3.1.3 The teeth shown in figure 8 of \(D 3\) have projections on their edge-faces. However, even if the part below each of these projections were to be regarded as a recess, there is no straight-line portion which is shown which is parallel or substantially parallel to the basis of the wire.
3.1.4 The subject-matter of claim 1 of the first auxiliary request is therefore novel within the meaning of Article 54 EPC 1973 over the cited prior art.
3.2 Inventive step
3.2.1 Although the appellant considered both documents D1 and D3 as representing closest prior art, the Board takes the view that only D3 is appropriate to be considered as such. D1 refers generally to combing and carding machines and the embodiment disclosed in its figures concerns teeth elements for combing whereas D3 refers specifically to carding machines. Hence it is particularly suitable for forming the closest prior art.
3.2.2 The technical problem underlying the claimed invention is to increase the efficiency with which fibres are transferred from the swift to the doffer. The card clothing will also be applicable as a worker wire because workers operate in exactly the same way as doffers (col. 2, par. [0009]).
3.2.3 This technical problem is solved by the card clothing having the features of claim 1. The subject-matter
claimed is distinguished from the saw tooth fittings disclosed in D3 by an undercut segment which includes at least a portion that is substantially parallel to the longitudinal dimension of the profile. The various embodiments shown in D3 have profiles on the trailing edge of the teeth. The embodiment shown in figure 8 is modified as regards its leading edge by a projection having substantially rising and falling angles with respect to the basis of the profile. Since in that document there is no indication suggesting the variation of the angles of the projection the skilled person would not find there any motivation to form the angles of the projection in a different manner, in particular none to form a portion parallel to the basis of the profile.
3.2.4 Even taking D1 as representing the closest prior art the skilled person would not arrive at claim 1 without an inventive step. The invention is distinguished from D1 by an undercut segment of the edge-face of the teeth which includes at least a portion that is substantially parallel to the longitudinal dimension of the profile. The profile disclosed in \(D 1\) does not have any portion which could be identified as being parallel to the basis because the profiles of the teeth are formed only by curved lines. To the skilled person parallelism involves straight lines. Therefore the skilled person would not see any reason to change the curved lines into straight lines since there is no indication suggesting such modification.
3.2.5 No obvious way can be seen by which the skilled person would be led to the subject matter of claim 1 starting from either D3 or D1 as the closest prior art.

Therefore the claimed invention involves an inventive step. Together with claim 1, the amended dependent claims 2 to 10 claiming particular embodiments of the invention can also be maintained.

\section*{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 with the order to maintain the patent on the basis of:
(a) Claims 1 to 10 according to the first auxiliary request filed during the oral proceedings;
(b) The amended description, columns 1 to 6, as filed during the oral proceedings;
(c) Figures 1 to 7 as filed during the oral proceedings.

The Registrar:
The Chairman:
M. Patin
K. Garnett
\begin{tabular}{lll} 
Europäisches & European & \begin{tabular}{l} 
Office européen \\
des brevets
\end{tabular}
\end{tabular}

\title{
D E C I S I O N \\ correcting errors in the decision of the \\ Technical Board of Appeal 3.2 .06 \\ of 15 July 2011
}
\begin{tabular}{ll} 
Appellant: & Graf + Cie AG \\
(Opponent) & \begin{tabular}{l} 
Bildaustrasse 6 \\
\\
\\
CH-8640 Rapperswil (CH)
\end{tabular} \\
Representative: & \begin{tabular}{l} 
Ruff, Wilhelm, Beier, Dauster \\
Postfach 10 40 36 \\
D-70035 Stuttgart
\end{tabular}
\end{tabular}
```

Respondent:
(Patent Proprietor)
COMMONWEALTH SCIENTIFIC AND INDUSTRIAL
RESEARCH ORGANISATION
Limestone Avenue
Campbell, ACT 2612 (AU)
Representative:
Wraige, David Leslie Charles
Elkington and Fife LLP
Prospect House
8 Pembroke Road
Sevenoaks
Kent TN13 1XR (GB)

| Decision under appeal: | Decision of the Opposition Division of the |
| :--- | :--- |
| European Patent Office posted 19 June 2009 |  |
| rejecting the opposition filed against European |  |
| patent No. 1153162 pursuant to Article $102(2)$ |  |
|  | EPC. |

```

Composition of the Board:
\(\begin{array}{ll}\text { Chairman: } & \text { K. Garnett } \\ \text { Members: } & \text { G. Kadner } \\ & \text { G. de Crignis }\end{array}\)

Pursuant to Rule 140 EPC, the decision given on 15 July 2011 in case \(T\) 1933/09-3.2.06 is hereby corrected as follows:

Order, point 2.
"(c) Figures 1 to 7 as filed during the oral proceedings."
is corrected to
"(c) Figures 1 to 4 as granted, Figures 5 to 7 as filed during the oral proceedings."

The Registrar:
The Chairman:
M. Patin
K. Garnett```

