DECISION
of 26 March 2003

Case Number: T 0306/00 - 3.2.5
Application Number: 95306385.6
Publication Number: 0705673
IPC: B29C 43/00

Language of the proceedings: EN

Title of invention:
Medical articles and method therefor

Applicant:
Becton Dickinson and Company

Opponent:
-

Headword:
-

Relevant legal provisions:
EPC Art. 56

Keyword:
"Inventive step (no)"

Decisions cited:
-

Catchword:
-
Case Number: T 0306/00 - 3.2.5

DECISION
of the Technical Board of Appeal 3.2.5
of 26 March 2003

Appellant: Becton Dickinson and Company
(Applicant)
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Representative: Ruffles, Graham Keith
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 2 November 1999 refusing European patent application No. 95 306 385.6 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: W. Moser
Members: P. E. Michel
H. M. Schram
Summary of Facts and Submissions

I. The appellant (applicant) lodged an appeal against the decision of the Examining Division refusing European patent application No. 95 306 385.6.

In the decision under appeal, it was held that the subject-matter of claim 1 did not involve an inventive step.

II. Claim 1 as filed during oral proceedings held on 29 September 1999, on which the decision under appeal was based, reads as follows:

"1. A method for preparing a medical article comprising:

a) depositing a thermoset into a mold of a continuous compression molding apparatus;

b) applying heat and pressure to said thermoset whereby an article having the shape of the mold is formed in the mold; and

c) removing said article from the mold."

III. The following documents are referred to in the appeal proceedings:

D1: EP-A-0 204 486


IV. The arguments of the Examining Division may be summarised briefly as follows:
Document D1 is the closest prior art. The fact that the non-vulcanised rubber is available as a layer or plate (5) implies that it is reticulated up to a certain range and therefore falls within the definition of "thermoset". The subject-matter of claim 1 thus differs from the disclosure of this document solely by virtue of the feature "continuous". The object of the invention is to increase production output. It is obvious to use a continuous compression molding apparatus in view of the disclosure of document D2.

V. The appellant requests that the decision under appeal be set aside and that a patent be granted on the basis of Claim 1 as filed during oral proceedings held on 29 September 1999, on which the decision under appeal was based.

VI. The appellant argues essentially as follows:

The presence of a degree of cross-linking in the non-vulcanised rubber of document D1 does not imply that the material is a thermoset. Further, partial vulcanisation is not a prerequisite for the rubber materials of document D1 to exist as a solid. Among the materials listed in document D1 is isoprene rubber, which is thermoplastic until vulcanised. The term "vulcanised" is defined as referring to rubber which has undergone a chemical reaction with sulphur or other vulcanising agent to cause crosslinking of the polymer chains. The use of the term "non-vulcanised" thus means that the polymers of document D1 are not crosslinked and are thus not thermoset.

VII. In a communication dated 28 October 2002, representing the provisional opinion of the Board, reasons were given as to why it appeared that the decision under appeal could be accepted. On 9 December 2002, the
appellant withdrew his auxiliary request for oral proceedings and asked for a decision based on the written record.

Reasons for the Decision

1. Amendments

Claim 1 has been amended as compared with claim 1 of the application as filed by the replacement of the term "nonthermoplastic polymer" by "thermoset". The sentence in the published version of the application as filed at column 3, lines 11 and 12, provides support for this amendment. The amended claim is thus allowable in view of Article 123(2) EPC.

2. Inventive step

The term "thermoset" is generally understood to refer to a cured plastic which, owing to the degree of cross-linking involving covalent bonding of carbon atoms, is substantially rigid and not thermoformable. In order to obtain a shaped body of a thermoset, curing is generally carried out in a mould.

However, according to claim 1, the thermoset is moulded to the form of the desired article with the application of heat and pressure. The term "thermoset" as used in the claim thus cannot be construed as referring to a fully cured material which cannot be thermoformed. The term must thus be understood as including within its scope an uncured or only partially cured thermoset which is capable of undergoing deformation and curing or vulcanisation during compression moulding.
Accordingly, the non-vulcanised rubber as disclosed in document D1 falls within the scope of the term "thermoset" as used in the claim.

The subject-matter of claim 1 is thus distinguished over the disclosure of document D1 solely by virtue of the use of a continuous compression moulding apparatus.

The Board agrees with the reasoning of the Examining Division as set out in paragraph 3 of the decision under appeal, that the use of a continuous compression moulding apparatus as disclosed in document D2, as opposed to a batch compression moulding apparatus, does not involve an inventive step.

The subject-matter of claim 1 thus does not involve an inventive step, and the appeal must accordingly be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

M. Dainese W. Moser