Datasheet for the decision of 10 April 2008

Case Number: T 0339/05 - 3.3.01
Application Number: 99202250.9
Publication Number: 0978548
IPC: C09D 11/00
Language of the proceedings: EN

Title of invention:
Ink composition for a meltable ink

Applicant:
Océ-Technologies B.V.

Opponent:
-

Headword:
Melttable ink/Océ

Relevant legal provisions:
EPC Art. 83

Relevant legal provisions (EPC 1973):
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Keyword:
"Sufficient disclosure of the invention (no) - no hint where to look for compounds meeting the requirements of claim 1 other than those explicitly disclosed - research program"

Decisions cited:
T 0409/91, T 0516/99

Catchword:
-
Case Number: T 0339/05 - 3.3.01

DECISION
of the Technical Board of Appeal 3.3.01
of 10 April 2008

Appellant: Océ-Technologies B.V.
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 16 November 2004 refusing European application No. 99202250.9 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: P. Ranguis
Members: C. M. Radke
          C. P. Brandt
Summary of Facts and Submissions

I. The appeal lies from the decision of the examining division to refuse the patent application.

II. The examining division decided that claims 1 to 3 and 8 to 10 did not meet the requirements of Article 84 EPC because they were not supported by the description. In particular, the examining division pointed out that there was not sufficient technical guidance in the description as how to obtain without excessive experimentation the "amorphous solidifying monomer compounds" defined by the parameter given in claims 1, 2, 8 and 9.

III. The decision was based on the claims as originally filed. Claim 1 of these reads as follows:

"An ink composition for a meltable ink usable in printing apparatus in which ink droplets are ejected from ink ducts, the ink composition containing an amorphously solidifying monomer compound, characterised in that the said compound shows a crystallinity of less than 1% when a melt of the compound is cooled at a rate of 5°C/min to past its solidification path and is then heated at a rate of 20°C/min to above its melting temperature."

IV. In its notice of appeal dated 14 January 2005 the Appellant (applicant) filed an auxiliary request for oral proceedings. A statement setting out the grounds of appeal was filed with the letter dated 17 February 2005.
V. The Board summoned the Appellant to oral proceedings by letter dated 16 November 2007. Under point 5 of the communication annexed to the summons, the Board gave reasons for its preliminary and non binding opinion that the application did not meet the requirements of Article 83 EPC.

VI. In the letter dated 26 March 2008, the Appellant indicated that he would not attend the oral proceedings, withdrew his auxiliary request for oral proceedings, asked the Board to take a decision "on the file as it stands" and filed amended claims.

VII. The Appellant was notified by letter dated 03 April 2008 that the oral proceedings had been cancelled.

VIII. The claims on file are
- claims 1 to 17 of the Main Request,
- claims 1 to 17 of the First Auxiliary Request,
- claims 1 to 15 of the Second Auxiliary Request,
- claims 1 to 16 of the Third Auxiliary Request,
- claims 1 to 16 of the Fourth Auxiliary Request,
- claims 1 to 14 of the Fifth Auxiliary Request,
- claims 1 to 14 of the Sixth Auxiliary Request,
- claims 1 to 14 of the Seventh Auxiliary Request, and
- claims 1 to 12 of the Eighth Auxiliary Request, all enclosed with the letter dated 26 March 2008.

The wording of claim 1 of each of these requests is identical with the one of claim 1 as originally filed (see point III above).
IX. The Appellant argued that the fact that the "amorphously solidifying monomer" is defined by a parameter, could not justify an objection under Article 83 EPC as
- this parameter could be reliably determined,
- it was not mandatory to give instructions in the claims as how to obtain the compounds, and as
- the subject-matter claimed was restricted to compositions containing the compound fulfilling said parameter.

It admitted that it may be a lot of work to find compounds other than the exemplified ones "because there are not too many compounds that show the claimed behaviour". However, it added, this did not impose an undue burden on the skilled person as binders other than the specified esters of 2,2'-biphenol could be found by routine experimentation following the procedure described on page 3, lines 16-26, of the present application.

It considered the burden of proof to be on the Board to show that the invention could not be carried out over the whole range claimed.

X. The Appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims of the Main Request or on the basis of any of the First to Eighth Auxiliary Requests, all filed with the letter dated 26 March 2008.
**Reasons for the Decision**

1. **The appeal is admissible**

**Main Request**

2. **Article 123 (2) EPC**

   The wording of the claims differs only from that of the claims as originally filed in that in claim 15 the expression "selected from the group H and C1-C4 alkyl" has been replaced by "selected from the group C1-C4 alkyl".

   The Board is satisfied that this amendment meets the requirement of Article 123 (2) EPC.

3. **Article 83 EPC**

   3.1 In claim 1, the "amorphous solidifying monomer compound" is characterised in that it "shows a crystallinity of less than 1% when a melt of the compound is cooled at a rate of 5°C/min to past its solidification path and is then heated at a rate of 20°C/min to above its melting temperature.", i.e. that it shows no "cold crystallisation" (see page 2, lines 11-17 of the application as filed).

   3.2 The only amorphous solidifying monomer compounds satisfying this parameter which are disclosed in the application as filed are 2,2'-biphenol esters of carboxylic acids having an aromatic character (see page 1, lines 32-33 of the original description and claim 4 as originally filed).
The Appellant argued that "Other binders than the
exemplified esters of 2,2'-biphenol can be identified
by simple routine experimentation, following the
procedure as described on page 3, lines 16-26." (see
the bottom paragraph on page 1 of his letter dated
17 February 2005).

However, this procedure only describes how to determine
whether or not a compound meets the parameter defined
in claim 1. It gives no indication how to select the
"amorphous solidifying monomer compounds" to be tested
according to that procedure.

Moreover, the examples of the present application show
that many aromatic or non aromatic esters other than
that of 2,2'-biphenol do not satisfy the parameter
indicated in claim 1 (see the compounds of the general
formulae B, C, D, E and F depicted in table 1 of the
application). So, the present examples actually give
the impression that - apart from the monomers defined
by their chemical structures in the description, namely
the 2,2'-biphenol esters of carboxylic acids having an
aromatic character - few, if any, further suitable
monomers could be found.

The Appellant confirmed this impression by pointing out
that "it may be a lot of work to find compounds other
than the exemplified ones, possibly because there are
not too many compounds that show this behaviour, ..."
(see page 2 of his letter dated 17 February 2005).

Hence it has to be determined whether or not this "lot
of work" means that the subject-matter of claim 1 does
not meet the requirements of Article 83 EPC, i.e. whether or not it imposes an undue burden on the person skilled in the art trying to perform the claimed invention in the whole area claimed (see T 409/91, OJ EPA 1994, 653, point 3.5 of the reasons).

The person skilled in the art trying to trace monomers meeting the required parameter does not have at his disposal, neither by his common general knowledge nor by means of the disclosure in the application as filed, any information leading with a reasonable probability towards other monomers having the defined parameter other than those specifically disclosed.

Consequently, the person skilled in the art has to find out merely by trial and error as to which, if any, compound meets the parameter set out in claim 1, i.e. by proceeding on a lottery basis or by making own investigations without the shadow of any useful guidance, namely by performing a research program.

This constitutes an undue burden (see T 516/99 of 15 October 2002, the last two paragraphs of point 3.1 of the reasons).

3.7 That means that the fact that this can be done by routine experimentation is not sufficient for the subject-matter claimed to meet the requirements of Article 83 EPC (see the second paragraph of point IX above).

3.8 Nor does the question whether or not the parameter can be reliably determined play a role (see the first paragraph of point IX above).
3.9 Therefore the invention claimed in claim 1 does not meet the requirements of Article 83 EPC.

4. As the Board can only decide on a request as a whole, the Main Request is rejected.

5. It is evident that the Appellant did not disagree with the facts and arguments summarised under points 3.1 to 3.5 above (and in point 2 of the reasons of the decision under appeal; see point II above) but with the conclusions drawn therefrom in points 3.6 to 3.9 above. So, the question whether or not the Board has the burden to prove the statement made under point 3.9 above is not relevant for the outcome of this decision and need not be discussed (see the third paragraph of point IX above).

Auxiliary Requests

6. As the wording of claim 1 of each of the auxiliary request is identical with the one of the Main Request, the reasons for rejecting the Main Request also apply to each of the auxiliary requests. Therefore, the auxiliary requests have also to be rejected.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:    The Chairman:

D. Meyfarth     P. Ranguis