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**Datasheet for the decision
of 22 February 2007**

Case Number: T 1298/05 - 3.4.02

Application Number: 01966552.0

Publication Number: 1327166

IPC: G02B 3/00

Language of the proceedings: EN

Title of invention:
High definition lenticular lens

Applicant:
National Graphics, Inc.

Opponent:
-

Headword:
-

Relevant legal provisions:
EPC Art. 84, 52(1), 54

Keyword:
"Clarity and novelty (all requests: no)"
"Decision on the state of the file - dismissal of appeal on
the grounds previously communicated to the appellant"

Decisions cited:
-

Catchword:
-



Case Number: T 1298/05 - 3.4.02

D E C I S I O N
of the Technical Board of Appeal 3.4.02
of 22 February 2007

Appellant: National Graphics, Inc.
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Representative: McLeish, Nicholas Alistair Maxwell
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 24 April 2005
refusing European application No. 01966552.0
pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: A. G. Klein
Members: F. J. Narganes-Quijano
C. Rennie-Smith

Summary of Facts and Submissions

- I. The appellant (applicant) lodged an appeal against the decision of the examining division to refuse European patent application No. 01966552.0 (based on International application No. PCT/US01/27384 published with the International Publication No. WO 02/21166).

In the decision under appeal the examining division held that the subject-matter of claim 1 then on file did not involve an inventive step (Articles 52(1) and 56 EPC) in view of the disclosure of documents

D1: US-A-5266995

D2: US-A-5642226.

- II. With the statement setting out the grounds of appeal the appellant submitted sets of claims amended according to a main and first and second auxiliary requests and requested that the decision under appeal be set aside and that a patent be granted. The appellant also requested oral proceedings on an auxiliary basis.

Claim 1 of the main request of the appellant reads as follows:

"A high definition lenticular lens (10) comprising: a front surface comprising a plurality of lenticules (12), each of the lenticules having characteristic parameters that comprise a focal length (f), an arc angle (a), and a width (w) that is less than about 0.1693 mm (0.006667 inches); and a substantially flat back surface (14) opposite the front surface, the lens

having a gauge thickness (g) that is substantially equal to the focal length (f), the gauge thickness (g) being measured from the outmost edge of the curved surface of the lens to the back surface of the lens, characterised in that the arc angle (a) is greater than about 90 degrees."

The wording of claim 1 of the first auxiliary request differs from the wording of claim 1 of the main request in that the characterizing portion reads as follows:

"[...] characterised in that the arc angle (a) is greater than about 90 degrees, the lens gauge thickness (g) is less than about 0.254 mm (10 mils) and the lens gauge the thickness (g) being within a tolerance of \pm 0.006 mm (\pm 0.25 mils)."

The wording of claim 1 of the second auxiliary request differs from the wording of claim 1 of the main request in that the characterizing portion reads as follows:

"[...] characterised in that the arc angle (a) is greater than about 90 degrees, the lens gauge thickness (g) is less than about 0.254 mm (10 mils), and the gauge thickness (g) being within a tolerance of \pm 0.0025 m (\pm 0.1 mil) and the lens has an index of refraction in about the range of 1.3 to 1.8."

Each of the main and the first and second auxiliary requests includes, in addition, further independent claims and dependent claims the wording of which is not relevant to the present decision.

III. Oral proceedings were appointed, as requested by the appellant on an auxiliary basis. In a communication pursuant to Article 11(1) of the Rules of Procedure of the Boards of Appeal (RPBA), annexed to the summons to attend oral proceedings, the Board gave a preliminary assessment of the case. The Board, in particular, raised objections of lack of clarity (Article 84 EPC), of lack of novelty (Articles 52(1) and 54 EPC) and of lack of inventive step (Articles 52(1) and 56 EPC) with regard to the claims of each of the main and the first and second auxiliary requests.

More particularly, as far as the subject-matter of claim 1 of each of the main and the first and second auxiliary requests is concerned, the Board commented as follows:

Article 84 EPC - Claim 1 of the main and the first and second auxiliary requests:

"It is unclear (Article 84 EPC), as regards the subject-matter of claim 1 according to each of the three requests, what is meant by the "arc angle" of a lenticule and, in particular, how the arc angle is determined (see in this respect the disclosure of the application with reference to Figs. 1B, 2B, 3B, 4B and 5B).

It is also unclear what "tolerance" is considered in claim 1 according to the first and the second auxiliary requests (Article 84 EPC), it being noted that the application as published only supports the claimed tolerance value as that relating to the relative position of the focal length and the gauge thickness,

see in this respect page 16, line 22 to page 17, line 2 of the application as published (Article 123(2) EPC)."

Articles 52(1) and 54 EPC - Claim 1 of the main request:

"It appears to be undisputed by the appellant that, as held by the examining division in the contested decision, document D1 discloses a high definition lenticular lens (Fig. 1 and 7) comprising a front surface and an opposite flat back surface, the front surface comprising a plurality of lenticules preferably with a density of at least 300 lenticules per inch (column 8, lines 47 to 55) and therefore having a lenticule width of about 0.08467 mm that is less than about 0.1693 mm as required by claim 1 of each of three requests presently on file, the lens having a gauge thickness substantially equal to the focal length of the lenticules (column 11, lines 58 to 62).

In addition, according to the disclosure of document D1 the lenticules preferably have the shape of a "half cylinder split longitudinally" (column 10, lines 49 and 50) as actually shown schematically in Fig. 1 and 7 of the document. Thus, the lenticules of document D1 have an "arc angle" as defined in the present application with reference to Figs. 1B, 2B, 3B, 4B and 5B of about 180° and therefore, contrary to the opinion expressed by the examining division in the decision under appeal, it appears that document D1 contains a clear disclosure towards the lenticules having an arc angle greater than about 90° as required by the subject-matter of claim 1 of the main request.

Having regard to the above, the subject-matter of claim 1 of the main request appears to be anticipated by the disclosure of document D1 (Articles 52(1) and 54 EPC)."

Articles 52(1) and 54 EPC - Claim 1 of the first auxiliary request:

"Document D1 specifies that the material of the lenticular lens is polycarbonate (column 11, lines 63 to 67) that has a refractive index of about 1.58. In addition, as noted [...] above, the lenticules have a width of 0.08467 mm and are semi-cylindrical, i.e. the radius of the lenticules is of about 0.04233 mm. It follows from purely optical and geometrical considerations (and in particular from equations (2), (3) and (4) on page 15 of the description of the present application relating the focal length of the lenticules to the refractive index and the radius of the lenticules) that the focal length is of the order of three times the lenticule radius 0.04233 mm (see also document D2, column 1, lines 53 to 56), i.e. of about 0.1270 mm. In addition, since in document D1 the focal length is substantially equal to the lens gauge thickness (column 11, lines 58 to 62), it follows that the lens gauge thickness is of about 0.1270 mm and therefore below 0.254 mm as required by the subject-matter of claim 1 according to the first auxiliary request.

In addition, document D1 teaches that the focal length of the lenticules coincides with the gauge thickness (column 11, lines 58 to 62) and therefore clearly

teaches towards a zero value of the tolerance referred to [...] above.

It follows that the subject-matter of claim 1 of the first auxiliary request does not appear to be novel over the disclosure of document D1 (Articles 52(1) and 54 EPC)."

Articles 52(1) and 54 EPC - Claim 1 of the second auxiliary request:

"As already noted [...] above, the lenticular lens of document D1 is made of a material having an index of refraction of about 1.58.

Accordingly, the subject-matter of claim 1 according to the second auxiliary request also appears to be anticipated by the disclosure of document D1 (Articles 52(1) and 54 EPC)."

- IV. In reply to the summons to attend oral proceedings, the appellant - without submitting any substantive argument in reply to the objections noted by the Board - indicated by letter dated 14.02.2007 that it cancelled the request for oral proceedings and requested that a decision be issued on the file as it currently stands.

The Board subsequently cancelled the oral proceedings.

- V. The sole substantive arguments advanced by the appellant were developed in the statement setting out the grounds of appeal and concerned the issue of lack of inventive step raised by the examining division. These arguments, however, pre-date, and in addition

have no bearing on, the issues of lack of clarity and lack of novelty subsequently raised by the Board in the aforementioned communication.

Reasons for the Decision

1. The appeal is admissible.

2. In the communication pursuant to Article 11(1) RPBA annexed to the summons to oral proceedings the Board explained in detail why in its preliminary opinion the subject-matter of claim 1 amended according to each of the main and the first and second auxiliary requests is not clear (Article 84 EPC) and, in any case, is not novel with regard to the disclosure of document D1 (Articles 52(1) and 54 EPC).

In the course of the proceedings the appellant made no substantive submissions in reply to the detailed objections raised by the Board in its communication and, in addition, requested a decision on the state of the file and withdrew the request for oral proceedings - which were subsequently cancelled by the Board. The appellant has therefore not availed itself of the opportunity to reply to the preliminary view expressed by the Board in its communication.

After consideration of the issues addressed in the aforementioned communication and in the absence of any attempt by the appellant to refute or overcome the objections raised with regard to claim 1 of each of the appellant's requests (point III above), the Board sees no reason to depart from the preliminary opinion

expressed in the aforementioned communication. Accordingly, noting that the appellant has had, and has failed to use, the opportunity to present comments on the objections raised by the Board (Article 113(1) EPC), the Board concludes that claim 1 of each of the requests of the appellant does not comply with the formal requirements of Article 84 EPC and with the substantive requirements of Articles 52(1) and 54 EPC, and that consequently the requests of the appellant are not allowable. The appeal must therefore be dismissed for the reasons already communicated to the appellant and reproduced in point III above (Rule 66(2) (g) EPC).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

M. Kiehl

A. G. Klein