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D E C I S I O N
of 13 November 2001

Case Number: T 1040/97 - 3.5.1
Application Number: 90104449.5
Publication Number: 0389842
IPC: H04N 13/04, H04N 15/00, H04N 9/12

Language of the proceedings: EN

Title of invention:

Autostereoscopic display with multiple sets of blinking
illuminating lines and light valve

Applicant:

Dimension Tehnologies, Inc.

Opponent:

-

Headword:

Autostereoscopic display/DIMENSION TECHNOLOGIES

Relevant legal provisions:

EPC R. 86(3)

Keyword:

"Exercise of discretion in due consideration of circumstances"
"Power of board of appeal to reopen examination in *ex parte*
appeal proceedings"

Decisions cited:

G 0010/93

Catchword:

-



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Boards of Appeal

Chambres de recours

Case Number: T 1040/97 - 3.5.1

D E C I S I O N
of the Technical Board of Appeal 3.5.1
of 13 November 2001

Appellant: Dimension Technologies, Inc.
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New York 14607 (US)

Representative: UEXKÜLL & STOLBERG
Patentanwälte
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 26 May 1997
refusing European patent application
No. 90 104 449.5 pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: S. V. Steinbrener
Members: R. R. K. Zimmermann
S. C. Perryman

Summary of Facts and Submissions

- I. The appeal concerns European patent application No. 90 104 449.5 (publication No. 0 389 842). The application was refused by the examining division responsible for the examination for the reason that the only text of the application considered allowable by the examining division was not agreed by the applicant.
- II. In the examination procedure preceding the refusal the examining division issued two communications raising various grounds of objections to the grant of a patent to which the applicant reacted by repeatedly making amendments. In a communication under Rule 51(4) EPC, dated 30 March 1995, the examining division finally informed the applicant of the text in which it intended to grant the European patent. The text considered allowable conformed, except for some minor amendments, with the then main request of the applicant and included a single independent claim which read as follows:

"1. An electronic display unit for forming autostereoscopic images for 3-D viewing, which comprises

(a) an illumination surface (1) including a plurality of groups (2,3; 2,3; etc.) of light sites in which each group of light sites includes at least two sets (2,3) of light emitters;

(b) means for simultaneously turning one of the light sets (2) in each group (2,3) of light emitters on and then off and then turning another one of the light sets (3) in each group (2,3) on and off, and so on in succession, one set after the other such that each succeeding set in each group is turned on and off in

sequence, and to repeat this process continuously, whenever the unit is turned on;

(c) a light valve (4) in front of and parallel to said illumination surface (1), said light valve having individual picture elements (5) on its surface, said light valve being capable of displaying different images every time one set of light emitters in each of the different groups of light sites simultaneously flash on and off."

III. The applicant informed the examining division that it was not in a position to approve the text proposed by the examining division, at the same time submitting a revised set of claims. According to the new request a formerly deleted feature should be reintroduced into claim 1 and further dependent claims added to the text. The examining division considering the claims to lack clarity, notified the applicant that it did not consent to the new request under Rule 86(3) EPC, and invited the applicant to submit its observations.

IV. In a letter dated 9 September 1996 the applicant submitted further amendments to the claims, in particular by deleting some of the dependent claims and amending others which had been objected to by the examining division; in addition, the applicant included a second independent claim and reintroduced one of the original dependent claims. The applicant explained that the new claims should take account of all the objections raised by the examining division.

V. The examining division thereupon refused the application; the decision was posted 26 May 1997.

As reason for the decision the examining division

stated that the applicant had had ample opportunity to amend the claims prior to the communication under Rule 51(4) EPC; at that stage the substantive examination was complete. Allowing new amendments, in particular the introduction of a second independent claim, would call into question the outcome of the substantive examination, which would be contrary to what was set out in the Guidelines, chapter C-VI, 4.9.

- VI. The applicant filed an appeal against this decision. The notice of appeal was received in writing by the European Patent Office on 18 July 1997; the appeal fee was paid the same day. The letter setting out the grounds of appeal was subsequently received on 29 September 1997.

In the notice of appeal the applicant requested reversal of the decision and grant of a patent on the basis of the request filed with the letter dated 9 September 1996. Oral proceedings were requested as well.

- VII. According to the grounds of appeal, the appellant was in a position to define adequate claims for the first time with the letter dated 9 September 1996. The application had been handled before by an attorney of a US law firm who since then had left the firm, a situation which had introduced some confusion into the prosecution of the application. The two independent claims pursued before the examining division were based on corresponding original claims and were believed to claim differing solutions to the same object so that the appellant did not expect any objections to be raised regarding the number of claims per category.

VIII. In a communication issued under Article 110(2) EPC the Board informed the appellant of its provisional opinion that the refused request had indeed been filed at a very late stage in the pre-grant procedure and indicated that it considered the examining division to have exercised its discretion under Rules 51(5), 2nd sentence and 86(3) EPC in due consideration of the circumstances.

IX. In a subsequent letter dated 10 July 2001 the appellant withdrew its former appeal requests and expressly approved the text of the application in the form in which the examining division had issued the communication under Rule 51(4) EPC on 30 March 1995. Regarding the appeal the appellant requested the Board to set aside the contested decision and to remit the case to the examining division.

Reasons for the decision

1. The appeal complies with the requirements of Articles 106 to 108 and Rules 1(1) and 64 EPC and is thus admissible.
2. As the appellant is no longer asking for consideration of the request which the examining division refused to consider in the exercise of its discretion under Rule 86(3) EPC, the basis for the decision under appeal is removed and the decision can be set aside and the case remitted to the examining division.
3. However in *ex parte* appeal proceedings, as ruled by the Enlarged Board of Appeal in decision G 10/93, Scope of examination in *ex parte* appeal/SIEMENS (OJ 1995, 172),

the board of appeal responsible must ensure that the application or the invention to which it relates meets the requirements of the EPC irrespective of any view taken by the examining division. Even after an approval under Rule 51(4) EPC the board may reopen the examination for "whatever reasons". The board may either incorporate the issue into the appeal and rule on the case itself, or ensure by way of referral to the examining division that the issue is included when examination is resumed.

In the view of the Board, in the present case the following objections arise relating to essential requirements of the EPC, some of which have not been dealt with in the preceding first instance proceedings, so that the examination should be re-opened, to allow the appellant to file appropriate amendments or convincing observations which dispel the objections.

Added subject-matter (Article 123(2) EPC)

4. The feature that the "illumination surface (1) includ(es) a plurality of groups (2,3; 2,3; etc.) of light sites in which each group of light sites includes at least two sets (2,3) of light emitters" has been introduced by amendment into claim 1 of the text as now approved by the appellant.

The Board cannot find any express disclosure of this feature in the application documents as originally filed. From the original description it appeared that the terms "light sites" and "light emitters" should be given a special meaning since the description explicitly indicated that the terms "light emitting line", "vertical row of light sites", and "column of

light sites" are interchangeable (see A-publication, column 4, lines 9 to 19). Taking into account the further terminology used in the description, it seems clear that the illuminating light should be understood as being emitted from so-called "light sites", which are also referred to as light emitting regions or locations and may take, in the described variants of the invention, different forms and shapes, in particular the form of lines or dots.

The present claim wording extends the terminology in such a manner that protection is now also sought for display units in which the "light sites" and "light emitters" are different entities, possibly having different technical functions and structure. This is an embodiment for which the Board cannot find any support in the original application documents. The same objection holds for the definitions of "groups" and "sets".

In fact, the application consistently refers to sets of light emitting sites but never to "groups of sets" or the like. Such a group-set hierarchy is not even mentioned when colour display and video standards are addressed although these embodiments would be an opportunity to introduce, if anywhere, a hierarchic concept. In column 8, third paragraph, the only place where the word "group" appears ("groups of blinking lines"), the text rather indicates that "the lines can be arranged and operated in exactly the same manner as it was previously discussed", i.e. only on the basis of the sets of light emitting sites. Operating light sites and pixels in a group-set hierarchy of the type as claimed cannot be considered as a mere play of words, since they involve some technical aspects which cannot

a priori be set aside as irrelevant for the question of patentability of the invention.

The feature, therefore at first view, appears to add new subject-matter to the content of the application as originally filed, which is not allowable under Article 123(2) EPC.

Lack of clarity (Article 84 EPC)

5. Incongruent definitions between claims and description risk producing ambiguities regarding the subject-matter for which protection is sought and thus being contrary to Article 84 EPC. As pointed out above such an incongruence between claim 1 and the description results from the definition of "light sites" and "light emitters" as well as from the definition of "groups" and "sets".

6. At least the independent claims, which have to include the essential technical features of the invention (Rules 29(1) and (3) EPC), should define the features individually as well as their technical contribution to the claimed subject-matter as a whole in a technically understandable manner since otherwise the function of claims and the purpose of Article 84 EPC, namely on the one hand to allow a reliable examination regarding the substantive patentability requirements of the EPC, on the other hand to provide the basis for determining the scope of protection as conferred by the application or the patent when granted, could not be paid due regard.

The technical meaning of the definitions given in claim 1 is unclear for various reasons. First, the claim leaves obscure what elements are turned or

flashed on and off "simultaneously". It is also unclear what the purpose of displaying "different images" is and how the features included in the claim contribute to the basic function of the claimed display unit, namely the formation of the autostereoscopic images.

Requirements of the description (Rule 27(1)(c) and (e) EPC)

7. The claims are exclusively directed to 3-D display units, whereas the description still refers to both, 3-D and 2-D display units (Figures 1 to 7 and Figures 8 to 11 and 16, respectively), a discrepancy which requires adaptation of the description to the claims.

Substantive requirements of the EPC of patentability

8. In view of the above objections and the amendments which are likely to be submitted by the appellant it is not considered appropriate to enter, at this stage, into the examination regarding the requirements of the EPC of Article 52(1) EPC. This examination will have still to be done in the subsequent first instance proceedings. Thus the Board considers it appropriate to remit the case to the examining division for further prosecution.
9. In the proceedings following the re-opening of the examination, the examining division should be bound by the ratio decidendi of the present appeal decision only in that the objections set out above are incorporated into the examination and the appellant is given, in accordance with the Implementing Regulations and as often as necessary, the opportunity to comment or to file amendments to overcome the objections. The examining division may form its opinion in accordance

with Articles 97(1) and (2) on refusal or grant,
without being bound to consider the objections raised
by the Board as established.

Order

for these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the first instance for further prosecution on the basis of the text of the application for which the examining division has issued a communication under Rule 51(4) EPC on 30 March 1995.

The Registrar:

The Chairman:

M. Kiehl

S. V. Steinbrener