DECISION
of 18 February 2004

Case Number: T 0863/01 - 3.4.2
Application Number: 95200388.7
Publication Number: 0658783
IPC: G02B 6/12

Language of the proceedings: EN

Title of invention:
Plate plastics optical waveguide

Applicant:
NIPPON TELEGRAPH AND TELEPHONE CORPORATION

Opponent:
-

Headword:
-

Relevant legal provisions:
EPC Art. 109(1), 111(1)

Keyword:
"Interlocutory revision"
"Remittal for further prosecution"

Decisions cited:
-

Catchword:
-
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DECISION
of the Technical Board of Appeal 3.4.2
of 18 February 2004

Appellant: NIPPON TELEGRAPH AND TELEPHONE CORPORATION
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 1 February 2001 refusing European application No. 95200388.7 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: A. G. Klein
Members: F. J. Narganes-Quijano
M. J. Vogel
Summary of Facts and Submissions

I. The appellant (applicant) has lodged an appeal against the decision of the examining division to refuse European patent application No. 95 200 388.7 (publication No. 0 658 783).

II. The decision was based on sets of claims according to a main request and first and second auxiliary requests. Claim 1 according to the main request was worded as follows:

"1. A planar plastics optical waveguide comprising: a core portion (3) composed of polysiloxane having a first refractive index and a cladding portion (2, 7) surrounding the core portion (3) and being composed of a polymer having a second refractive index which is lower than the first refractive index of the core portion (3); characterised in that said polysiloxane is a deuterated and/or halogenated polysiloxane having at least one kind of repeating unit represented by formula (II) or formula (III):

\[
\text{R}_3 \quad \text{Si-O-} \quad \text{R}_4
\]

wherein each of \( R_3 \) and \( R_4 \) is a group of formula \( C_nY_{2n+1} \) or of formula \( C_6Y_5 \) in which \( Y \) is a halogen atom or a deuterium atom and \( n \) is an integer of 1 to 5. "
Claim 1 according to the first and the second auxiliary requests then on file differed from claim 1 according to the main request in that the waveguide was adapted to pass light having a wavelength of 1.3 \( \text{Fm} \) or 1.55 \( \text{Fm} \) and in the deletion of the alternative relating to the groups \( R_3 \) and \( R_4 \) being of formula \( C_nY_{2n+1} \), respectively.

In the appealed decision the examining division held that the subject matter of claim 1 of the main and the second auxiliary requests then on file did not involve an inventive step (Articles 52(1) and 56 EPC) with regard to the prior art cited in the decision and that claim 1 according to the first auxiliary request then on file did not comply with the requirements of Article 123(2) EPC as the feature relating to light "having a wavelength of 1.3 \( \text{Fm} \) or 1.55 \( \text{Fm} \)" could not be derived from the content of the application as filed.

III. With the statement setting out the grounds of appeal the appellant filed an amended set of application documents including two independent claims 1 and 4, submitted arguments in support of the patentability of the claimed subject matter, and requested interlocutory revision under Article 109(1) EPC.

Claim 1 according to the present request reads as follows:

"1. A planar plastics optical waveguide, comprising a core portion (3), and a clad portion (2, 7) surrounding the core portion and having a refractive index lower than the core portion, characterised in that:

the core portion (3) is a deuterated and/or halogenated polysiloxane having a repeating unit
represented by the formula (II) including side chain of \( R_3 \) and \( R_4 \),

the clad portion (2, 7) is a deuterated and/or halogenated polysiloxane having a repeating unit represented by the formula (IV) including side chain of \( R_5 \) and \( R_6 \),

\[
\begin{align*}
\text{(II)} & \quad \text{(IV)} \\
\text{Si-O} & \quad \text{Si-O} \\
R_3 & \quad R_5 \\
R_4 & \quad R_6
\end{align*}
\]

wherein each of \( R_3 \), \( R_4 \), \( R_5 \) and \( R_6 \) is independently selected from a group of formula \( C_nY_{2n+1} \) and \( C_6Y_5 \), in which \( Y \) is a halogen atom or deuterium and \( n \) is an integer of 1 to 5, and

wherein the side chain of the core portion (3) is not identical to the side chain of the clad portion (2, 7), whereby the refractive index of the clad portion is differentiated from a refractive index of the core portion."

The wording of independent claim 4 according to the present appellant's request differs from that of claim 1 in that formulas (II) and (IV) are replaced by the two following formulas (III) and (V), respectively:

\[
\begin{align*}
\text{(III)} & \quad \text{(V)} \\
\text{Si-O} & \quad \text{Si-O} \\
R_3 & \quad R_5 \\
R_4 & \quad R_6
\end{align*}
\]
Reasons for the Decision

1. The appeal complies with the requirements mentioned in Rule 65(1) EPC and is therefore admissible.

2. Each of independent claims 1 and 4 amended according to the present appellant's request specify that the clad portion is a deuterated and/or halogenated polysiloxane having a repeating unit represented by the formula (IV) and (V), respectively, each unit including a side chain of $R_5$ and $R_6$, the side chain of the core portion being not identical to the side chain of the clad portion. However, these features were not recited in the subject matter of claim 1 according to the main and the second auxiliary requests considered in the decision under appeal, and the decision did not address the technical significance of these features for the assessment of inventive step. Consequently, the reasons given in the appealed decision for refusing the main and the second auxiliary requests on the grounds of lack of inventive step are no longer valid for the present amended claims.

In addition, none of the claims as amended according to the present request refers to light having a wavelength of 1.3 $\mu$m or 1.55 $\mu$m. Accordingly, the reasons for refusing the first auxiliary request then on file on the grounds that the request did not comply with Article 123(2) EPC no longer exist.

In view of the above, the reasons underlying the decision under appeal can no longer be regarded as applicable to the amended set of claims according to the present request of the appellant. Consequently, the substantial amendments submitted by the appellant
clearly meet the objections on which the decision relies and the appeal is therefore well founded.

3. The appeal being admissible and well founded, in the Board's judgment the examining division should have exercised its power to rectify its decision pursuant to Article 109(1) EPC, in accordance with the express request of the appellant.

The Board notes in this respect that any subsequent finding by the examining division of additional objections (i.e. objections other than those that gave rise to the contested decision) which might prejudice the grant of a patent on the basis of the amended application documents submitted by the appellant does not preclude rectification of the decision by way of interlocutory revision under Article 109(1) EPC (see in this respect "Case Law of the Boards of Appeal", 4th ed. 2001, chapter VII, section D-12; see also the relevant contents of the EPO Guidelines at E-XI-7 in both the version at the time the contested decision was taken and in the recently revised version of December 2003, the latter version reflecting more clearly the established case law).

4. It follows from the above considerations that the decision under appeal is to be set aside and, in view of the substantial amendments made to the claims, the Board finds it appropriate to exercise its power under Article 111(1) EPC and to remit the case to the department of first instance for further prosecution without comment as to the admissibility of the amendments and the substantive merits of the case.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance for further prosecution.

The Registrar: The Chairman:

P. Martorana A. G. Klein