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- (75) Inventors/Applicants (*for US only*): KIRKBIR, Fikret [TR/US]; 3740 Keystone Avenue #409, Los Angeles, CA
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*



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(54) Title: PROCESS FOR MAKING GLASS BODIES HAVING REFRACTIVE INDEX GRADIENTS

(57) Abstract: A process is suited for producing silica glass bodies having refractive index profiles. The process involves providing a porous body having an initially uniform dopant distribution, heating the porous body in a halogen-containing atmosphere to produce a dopant gradient, and densifying the porous body at an elevated temperature to produce the glass body. The process is more cost-effective than those previously known, and allows for high reproducibility of the refractive index gradients of the bodies produced.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/23353

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 C03B19/14 C03B19/12 C03B37/014

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C03B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 254 508 A (KIRKBIR FIKRET ET AL) 19 October 1993 (1993-10-19) claims 5-8; examples ---	1-18
X	EP 0 164 127 A (SUMITOMO ELECTRIC INDUSTRIES) 11 December 1985 (1985-12-11) abstract; claims ---	1-10, 12-17
A	RUILI H ET AL: "PREPARATION OF RARE EARTH ELEMENT DOPED GRADIENT INDEX GLASS" PROCEEDINGS OF INTERNATIONAL CONGRESS OF GLASS, XX, XX, vol. 4, 1995, pages 222-227, XP000749239 page 222 --- -/--	11-18

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>SANADA K ET AL: "CHLORINATION AND VAPORIZATION OF GEO2 COMPONENT IN SIO2:GEO2 POROUSPREFORM IN DEHYDRATION PROCESS BY VAD METHOD AND SPONTANEOUS FORMATION OF SIO2 CLADDING LAYER DURING THE DEHYDRATION BY SELECTIVE VAPORIZATION OF GEO2"                      JOURNAL OF NON-CRYSTALLINE SOLIDS, NORTH-HOLLAND PHYSICS PUBLISHING. AMSTERDAM, NL, vol. 194, no. 1/2, 1996, pages 163-172, XP000542561                      ISSN: 0022-3093                      the whole document</p> <p style="text-align: center;">----</p>	1-18
A	<p>EP 0 171 537 A (SUMITOMO ELECTRIC INDUSTRIES) 19 February 1986 (1986-02-19)                      the whole document</p> <p style="text-align: center;">-----</p>	1-18

## INTERNATIONAL SEARCH REPORT

information on patent family members

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