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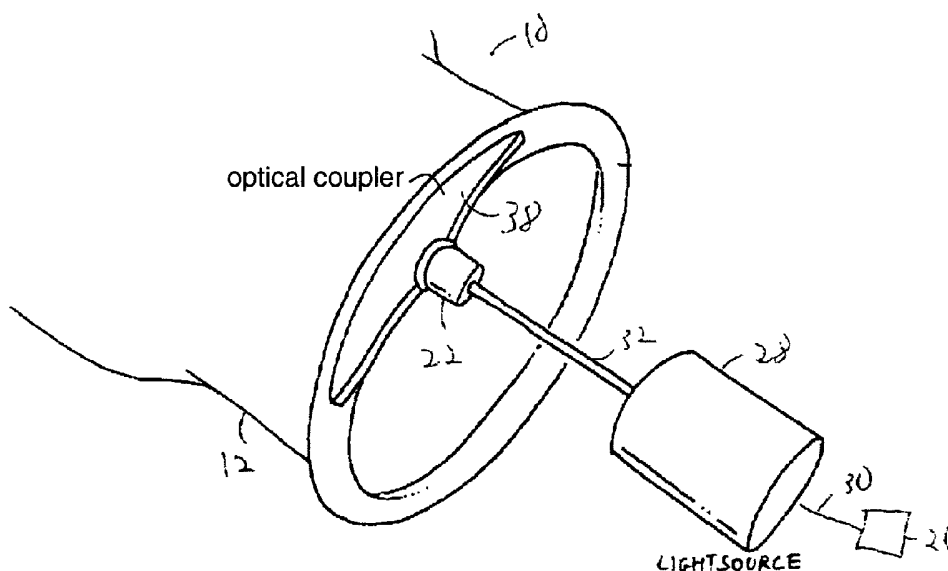
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[Continued on next page]

(54) Title: FLEXIBLE OPTICAL DEVICE



(57) Abstract: A flexible and optionally highly elastic waveguide capable of propagating and emitting light (51) is disclosed. The flexible waveguide (50) comprises a flexible material (52) having a surface and an end, wherein a first portion of the light is emitted through at least a portion of the surface (54) of the flexible waveguide (50), and a second of the light (51) is emitted through the end. The flexible waveguide (50) can be used, for example as an area illuminator for many applications. Additionally disclosed is a clothing device for providing illumination. The clothing device (10) comprises clothing (or even optionally a sheet) and a light source for providing light. In one embodiment the clothing device comprises the flexible waveguide.

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# INTERNATIONAL SEARCH REPORT

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61F 2/06; A61B 18/00; H01L 29/82; G02B 6/10, 21/00  
 US CL : 600/309, 310; 623/1.15; 604/265; 606/108, 191, 192, 200; 128/303.1, 4-8; 257/431

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## B. FIELDS SEARCHED

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 U.S. : 600/309, 310; 623/1.15; 604/265; 606/108, 191, 192, 200; 128/303.1, 4-8; 257/431

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
 NONE

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

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4,669,467 A (WILLETT et al) 02 June 1987 (02.06.1987), see entire document.	63-89
Y	US 5,559,358 A (BURNS et al) 24 September 1996 (24.09.1996), see entire document.	63-89
Y	US 6,408,123 B1 (KURODA et al) 18 June 2002 (18.06.2002), see entire document.	1-89
Y	US 6,488,704 B1 (CONNELLY et al) 03 December 2002 (03.12.2002), see entire document.	1-62

Further documents are listed in the continuation of Box C.

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"O"	document referring to an oral disclosure, use, exhibition or other means		
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