



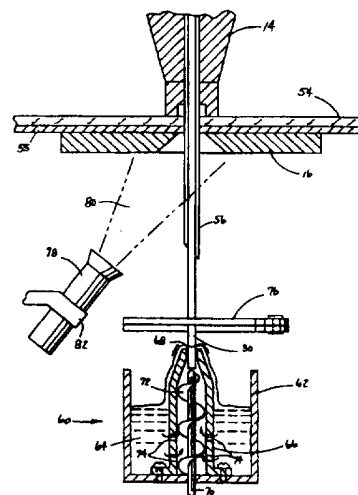
## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification <sup>6</sup> : <b>D05C 15/20, F21L 15/08</b></p>	<p><b>A3</b></p>	<p>(11) International Publication Number: <b>WO 97/26565</b> (43) International Publication Date: 24 July 1997 (24.07.97)</p>
<p>(21) International Application Number: PCT/US96/20405 (22) International Filing Date: 27 December 1996 (27.12.96) (30) Priority Data: 08/581,442 29 December 1995 (29.12.95) US (71)(72) Applicant and Inventor: WAINWRIGHT, Harry, Lee [US/US]; 918 Delaware Avenue, Bethlehem, PA 18015 (US). (72) Inventor: SCHWAR, Ronald, C.; 3310 Coffeetown Road, Allentown, PA 18104 (US). (74) Agent: PILTCH, Sanford, J.; The Atrium, Suite 204, 2895 Hamilton Boulevard, Allentown, PA 18104 (US).</p>	<p>(81) Designated States: AU, BR, CA, CN, IL, JP, KR, MX, RU, SG, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). <b>Published</b> <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 04 September 1997 (04.09.97)</p>	

(54) Title: APPARATUS AND METHOD FOR IMPLANTING OPTICAL FIBERS IN FABRIC PANELS AND THE LIKE

## (57) Abstract

An apparatus for implanting one or more optical fibers (30) in a panel (54) comprises a frame (22) for supporting a fiber inserter (56) above both a fiber insertion table (16) and a bath (60) containing ultra-violet light activated liquid adhesive (64) for adhering the optical fiber (30) to the panel (54) and a source of ultra-violet light (78). The fiber inserter (56) carries the optical fiber (30) downward to the fiber insertion table (16) piercing the interposed panel (54) and carrying the optical fiber (30) to the underside of the panel (54) through an opening (58) in the fiber insertion table (16) for immersion into and removal from the liquid adhesive (64) in the bath (60). The subsequent irradiation by ultra-violet light (80) from source (78) sets the adhesive (64).



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INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US96/20405

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : D05C 15/20; F21L 15/08  
US CL : 156/93, 275.5, 275.7, 293, 379.8, 423, 578; 112/80.12  
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)

U.S. : 156/93, 275.5, 275.7, 293, 379.8, 423, 578; 112/80.12

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)  
none

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2,557,668 A (LINCOLN) 19 JUNE 1951 (19.06.51), entire document.	1-26
Y	US 3,993,523 A (HUNT, ET AL) 23 NOVEMBER 1976 (23.11.76), entire document.	1-26
Y	US 4,854,250 (STUVECKE, ET AL) 08 AUGUST 1989 (08.08.89), entire document.	1-26
A	US 4,875,144 A (WAINWRIGHT) 17 OCTOBER 1989 (17.10.89), entire document.	1-26
A	US 5,186,776 A (BOYCE, ET AL) 16 FEBRUARY 1993 (16.02.93), entire document.	1-26

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Date of the actual completion of the international search 16 JUNE 1997	Date of mailing of the international search report 11 JUL 1997
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