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(71) Applicant: CORNING INCORPORATED [US/US]; 1
Riverfront Plaza, Corning, NY 14831 (US).

(72) Inventor: DOWNIE, John, D.; 9 Knollbrook Lane East,
Painted Post, NY 14870 (US).

(74) Agent: SHORT, Svetlana, Z.; Corning Incorporated, SP
TI 3 1, Corning, NY 14831 (US).

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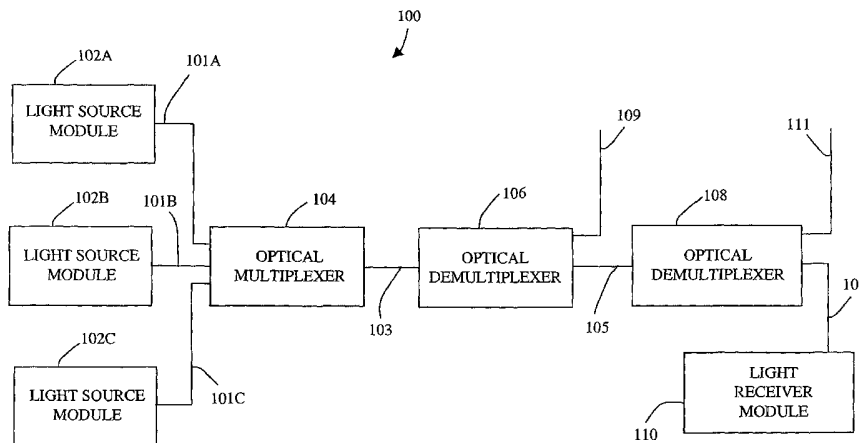
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(54) Title: OPTICAL SYSTEM THAT IMPROVES SPECTRALLY DISTORTED SIGNALS



(57) Abstract: An optical system (100) that maximizes signal quality related to spectral shape or an optical signal includes a light source module (102), a light receiver module (110), a plurality of fixed optical filters and a tunable optical filter (112). The light source module includes a light source that provides an optical signal to an optical fiber that includes a plurality of optical fiber segments. The light receiver module (110) includes a receiver input (112) that receives the optical signal from one of the plurality of the optical fiber segments. The plurality of fixed optical filters filter the optical signal and are coupled between the light source module (102) and the light receiver module (110) by the plurality of optical fiber segments. The tunable optical filter (112) includes a control input (113), a filter input (107) and a filter output (115). The filter input (113) receives the optical signal and the filter output (115) provides a filtered optical signal. A center filter frequency of the tunable optical filter is varied to maximize signal quality exhibited by the filtered optical signal responsive to a control signal on the control input (113).



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A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : GO2B 6/26 US CL : 385/31 According to International Patent Classification (IPC) or to both national classification and IPC		
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C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,815,299 A (BAYART et al.), 29 September 1998 (29.09.1998), column 4, lines 27-39; column 4, line 62 through column 5, line 3; column 5, lines 22-38; col. 6, lines 28-43; and col. 8, lines 39-54.	1-6, 15-19 and 26-30
X,P Y,P --- A,P	US 6,396,051 B1 (LI et al.), 28 May 2002 (28.05.2002), col. 8, lines 24-57 and col. 2, lines 37-60.	1-6, 15-19 and 26-30
Y,P	US 6,271,720 B1 (SEVASTOPOULOS), 07 August 2001 (07.08.2001), col. 7, lines 7-7-24 and Column 12, lines 25-34.	1-6, 15-19 and 26-30
Y	US 5,524,144 A (SUZUKI), 04 June 1996 (04.06.1996), col. 7, lines 1-4 and column 16-55 and column 6, lines 14-44.	1-3, 15-18 and 26-30
P	US 6,229,631 B1 (SATO et al.), 08 May 2001 (08.05.2001), column 2, lines 23-52.	1-30
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Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230	Authorized officer Frank Font <i>Shawn S. Nizpe</i> Telephone No. 305-4770	