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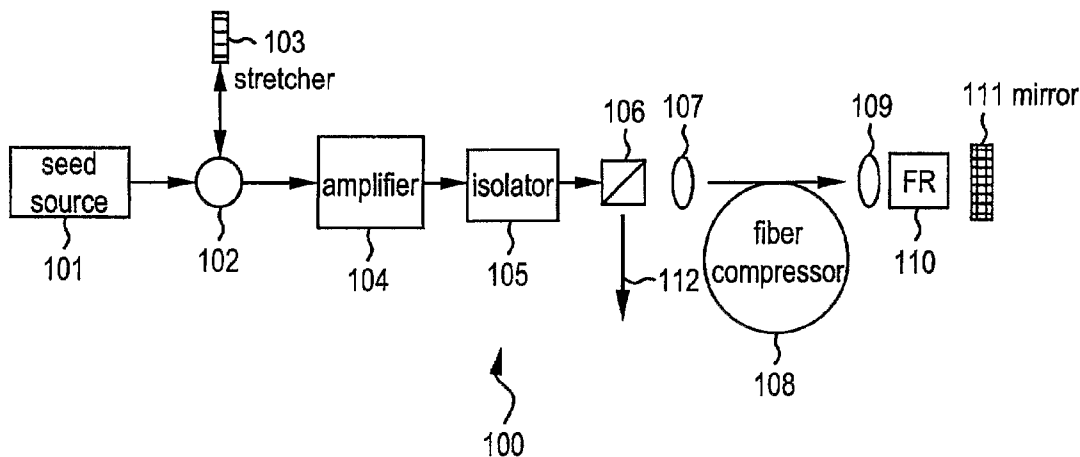
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(57) Abstract: By compensating polarization mode-dispersion as well chromatic dispersion in photonic crystal fiber pulse compressors, high pulse energies can be obtained from all-fiber chirped pulse amplification systems. By inducing third-order dispersion in fiber amplifiers via self-phase modulation, the third-order chromatic dispersion from bulk grating pulse compressors can be compensated and the pulse quality of hybrid fiber/bulk chirped pulse amplification systems can be improved. Finally, by amplifying positively chirped pulses in negative dispersion fiber amplifiers, low noise wavelength tunable seed source via anti-Stokes frequency shifting can be obtained.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC(7) : G02B 6/02; H04B 10/00; H01S 3/00
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 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)
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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 practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6,249,630 B1 (Stock et al) 19 June 2001 (19.06.2001), whole document.	1-24
A	US 6,621,040 B1 (Perry et al) 16 September 2003 (16.09.2003), whole document	1-24

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	"T"
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