

Title (en)
DRAW CONSTANT DOWNFEED PROCESS

Title (de)
KONSTANTES UNTERZIEHVERFAHREN

Title (fr)
PROCEDE DE DISTRIBUTION SUPERIEURE CONSTANTE PAR ETIRAGE

Publication
EP 1030823 A4 20001227 (EN)

Application
EP 98946905 A 19980910

Priority
• US 9818785 W 19980910
• US 5966297 P 19970925

Abstract (en)
[origin: WO9915470A1] Optical fiber (14) is drawn from a preform (10) that is fed to a furnace at a constant downfeed rate. The optical fiber (14) is drawn by a tractor (20) at a rate of at least 10 meters per second and the tractor (20) is allowed to vary the draw speed of the fiber (14) based on the fiber diameter as measured by a diameter monitor (15) during the draw processing in order to maintain a relatively constant fiber diameter. Maintaining the preform downfeed rate constant even at high draw rates in excess of 20 meters per second does not adversely effect the draw process and is believed to reduce or eliminate oscillations in the draw control loop that can cause variations in the core shape during fiber formation, resulting in reduced PMD and improved MFD uniformity.

IPC 1-7
C03B 37/027; **C03B 37/07**

IPC 8 full level
C03B 37/025 (2006.01); **C03B 37/027** (2006.01); **G02B 6/00** (2006.01)

CPC (source: EP KR)
C03B 37/02 (2013.01 - KR); **C03B 37/0253** (2013.01 - EP); **C03B 2205/06** (2013.01 - EP); **C03B 2205/40** (2013.01 - EP); **C03B 2205/42** (2013.01 - EP); **C03B 2205/44** (2013.01 - EP); **C03B 2205/72** (2013.01 - EP)

Citation (search report)
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• [XPY] DE 19716133 A1 19971211 - SAMSUNG ELECTRONICS CO LTD [KR]
• [A] EP 0795520 A1 19970917 - ALCATEL FIBRES OPTIQUES [FR]
• [YA] PATENT ABSTRACTS OF JAPAN vol. 15, no. 96 7 March 1991 (1991-03-07)
• [YA] PATENT ABSTRACTS OF JAPAN vol. 15, no. 52 7 February 1991 (1991-02-07)
• [YA] PATENT ABSTRACTS OF JAPAN vol. 18, no. 575 4 November 1994 (1994-11-04)
• [X] PAK U C ET AL: "FIBER DRAWING FROM 7.5 CM DIAMETER PREFORMS AT HIGH SPEED", OPTICAL FIBER COMMUNICATION CONFERENCE (OFC), US, NEW YORK, IEEE, vol. CONF. 11, 25 January 1988 (1988-01-25), pages 222 - 225, XP000011691, ISBN: 1-55752-022-4
• See references of WO 9915470A1

Designated contracting state (EPC)
DE ES FI FR GB IT NL

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DOCDB simple family (application)
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