

Title (en)
OPTICAL FIBER SCOPE WITH BOTH NON-RESONANT ILLUMINATION AND RESONANT COLLECTION/IMAGING FOR MULTIPLE MODES OF OPERATION

Title (de)
PRÜFVORRICHTUNG FÜR OPTISCHE FASERN SOWOHL MIT NICHTRESONANTER BELEUCHTUNG ALS AUCH RESONANTER SAMMLUNG/BILDGEBUNG FÜR MEHRERE BETRIEBSARTEN

Title (fr)
FIBROSCOPE OPTIQUE AVEC A LA FOIS ECLAIRAGE NON RESONANT ET COLLECTE/IMAGERIE RESONANTE POUR DE MULTIPLES MODES DE FONCTIONNEMENT

Publication
EP 2059838 A4 20091230 (EN)

Application
EP 06801970 A 20060821

Priority
US 2006032545 W 20060821

Abstract (en)
[origin: WO2008024101A1] A scanning fiber endoscope system selectively operable in a plurality of different modes. One or more illumination optical fibers convey different types of light to an internal site. A scanner resonantly driven in a desired pattern collects light from the internal site. The scanner can be a cantilevered distal end of a scanning optical fiber or a scanning mirror. The illumination optical fiber(s) can be moved in a nonresonant manner to alter the direction at which the light is emitted. In a therapy mode, a relatively high-power light can be applied to the site, while in a monitoring mode, the scanner can be used to image the tissue at the internal site after or during therapy. Exemplary SFE probes are disclosed for measuring scattering angle (which can detect larger cancer cell nuclear-to-cytoplasmic ratio), absorption depth, axial distance to tissue, and other conditions at the internal site.

IPC 8 full level
A61B 1/06 (2006.01); **G02B 6/06** (2006.01); **H01L 27/00** (2006.01)

CPC (source: EP US)
A61B 1/0008 (2013.01 - EP US); **A61B 1/00096** (2013.01 - EP); **A61B 1/00165** (2013.01 - EP); **A61B 1/00172** (2013.01 - EP); **A61B 1/043** (2013.01 - EP); **A61N 5/0601** (2013.01 - EP); **G02B 23/2423** (2013.01 - EP); **G02B 23/2469** (2013.01 - EP); **G02B 23/26** (2013.01 - EP); **G02B 26/103** (2013.01 - EP); **A61B 1/012** (2013.01 - EP); **A61N 2005/063** (2013.01 - EP); **G02B 2207/114** (2013.01 - EP)

Citation (search report)
• [X1] US 2001055462 A1 20011227 - SEIBEL ERIC J [US]
• [X1] WO 2005024496 A2 20050317 - UNIV WASHINGTON [US], et al
• [I] US 6545260 B1 20030408 - KATASHIRO MASAHIRO [JP], et al
• See references of WO 2008024101A1

Citation (examination)
US 6545260 B1 20030408 - KATASHIRO MASAHIRO [JP], et al

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2008024101 A1 20080228; EP 2059838 A1 20090520; EP 2059838 A4 20091230; JP 2010501246 A 20100121

DOCDB simple family (application)
US 2006032545 W 20060821; EP 06801970 A 20060821; JP 2009525530 A 20060821