

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 A1 20090520 (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
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