

Title (en)

DEVICE FOR THE DIRECT MANUAL EXAMINATION OF A PATIENT IN A NON-CONTIGUOUS LOCATION

Title (de)

GERÄT ZUR DIREKTEN MANUELLEN UNTERSUCHUNG EINES PATIENTEN IN EINER NICHT-ZUGÄNGLICHEN UMGEBUNG

Title (fr)

DISPOSITIF POUR L'EXAMEN MANUEL DIRECT D'UN PATIENT DANS UN EMPLACEMENT NON CONTIGU

Publication

EP 1322226 A2 20030702 (EN)

Application

EP 01979659 A 20011009

Priority

- US 0131640 W 20011009
- US 68532700 A 20001006

Abstract (en)

[origin: WO0228271A2] A device is disclosed that enables a physician to remotely perform a physical examination of a patient. The device includes a hand control unit (100) that is shaped to accommodate a physician's hand, and includes a number of sensory modulation subunits (140) that can simultaneously detect applied pressure and exert pressure back to the physician. The hand control unit (100) connects through a computer (160) to a remote patient examination module (200) interfaces with a remotely located patient, preferably by wrapping around the portion of the patient's body that is to be examined. The patient examination module (200) includes a plurality of sensory modulation subunits (240) arranged in an array forming a flexible pad (202). In operation the sensory modulation subunits (240) of the patient examination module (200) receive a signal from the hand control unit (100) that indicates the location and magnitude of pressure's applied to the hand control unit (100) by the physician, and replicates that pressure in the patient through the sensory modulation subunits (240), which simultaneously detect the responsive pressures exerted by the corresponding portions of the patient's body. The magnitude and location of these responsive pressures are converted to a digital signal that is fed back to the hand control unit (100) sensory modulation subunits (140), providing the physician with a tactile response simulating direct contact with the patient.

IPC 1-7

A61B 5/00

IPC 8 full level

A61B 5/00 (2006.01); **A61B 5/103** (2006.01); **A61B 8/08** (2006.01); **B25J 3/00** (2006.01); **B25J 13/02** (2006.01); **G06F 3/00** (2006.01); **G06F 3/01** (2006.01)

CPC (source: EP)

A61B 5/0022 (2013.01); **A61B 5/103** (2013.01); **A61B 5/6804** (2013.01); **A61B 5/6805** (2013.01); **A61B 5/7475** (2013.01); **A61B 8/08** (2013.01); **G06F 3/011** (2013.01); **G06F 3/016** (2013.01); **G16H 40/67** (2017.12); **A61B 5/6806** (2013.01); **A61B 5/6825** (2013.01); **A61B 5/6831** (2013.01); **A61B 2562/0247** (2013.01); **A61B 2562/046** (2013.01); **A61B 2562/168** (2013.01)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0228271 A2 20020411; **WO 0228271 A3 20020613**; AU 1159402 A 20020415; AU 2002211594 B2 20040617; AU 2002211594 C1 20041223; CA 2418161 A1 20020411; CA 2418161 C 20101130; EP 1322226 A2 20030702; EP 1322226 A4 20081210; JP 2004510479 A 20040408; JP 3885024 B2 20070221

DOCDB simple family (application)

US 0131640 W 20011009; AU 1159402 A 20011009; AU 2002211594 A 20011009; CA 2418161 A 20011009; EP 01979659 A 20011009; JP 2002531902 A 20011009