

Title (en)
ULTRASOUND SCANNING

Title (de)
ULTRASCHALL-ABTASTUNG

Title (fr)
BALAYAGE ULTRASONS

Publication
EP 0955887 A1 19991117 (EN)

Application
EP 97945961 A 19971127

Priority
• GB 9703259 W 19971127
• GB 9624970 A 19961129

Abstract (en)
[origin: GB2319841A] An ultrasound scanning technique for biological tissue examines the radio frequency signals derived from reflected ultrasonic energy to identify signal parameters indicative of particular tissue histology. Such identification is then used to produce a histological image of the biological tissue. The technique is particularly useful in the examination of blood vessels to identify different types of plaque within the vessel wall A, F. Lipid plaques D, E produce relatively low levels of reflection. Calcified plaques produce high levels of regular reflection. Fibrous plaques may be identified as a highly homogeneous thickened wall area that does not show the characteristics of a lipid plaque. A homogeneity value for the radio frequency signal is calculated for all areas not identified as lipid plaques or calcified plaques and then this homogeneity value is mapped to a colour that is displayed within the histological image. The various plaques are identified by searching and identifying signals having characteristic peak/trough values which satisfy threshold conditions.

IPC 1-7
A61B 8/06

IPC 8 full level
A61B 8/06 (2006.01); **A61B 8/08** (2006.01); **G01S 7/52** (2006.01); **G01S 15/89** (2006.01)

CPC (source: EP)
A61B 8/08 (2013.01); **G01S 7/52036** (2013.01); **G01S 7/52071** (2013.01); **G01S 7/52026** (2013.01); **G01S 15/8979** (2013.01)

Citation (search report)
See references of WO 9823210A1

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
GB 2319841 A 19980603; **GB 9624970 D0 19970115**; AU 5128398 A 19980622; CA 2272917 A1 19980604; CN 1245408 A 20000223; EP 0955887 A1 19991117; IL 130118 A0 20000601; JP 2001509043 A 20010710; WO 9823210 A1 19980604

DOCDB simple family (application)
GB 9624970 A 19961129; AU 5128398 A 19971127; CA 2272917 A 19971127; CN 97181575 A 19971127; EP 97945961 A 19971127; GB 9703259 W 19971127; IL 13011897 A 19971127; JP 52443498 A 19971127