

Title (en)
ECHOCARDIOGRAPHY WORKSTATION

Title (de)
ECHOKARDIOGRAFISCHER ARBEITSPLATZ

Title (fr)
POSTE DE TRAVAIL D'ECHOCARDIOGRAPHIE

Publication
EP 1090372 A2 20010411 (EN)

Application
EP 99916218 A 19990330

Priority
• US 9906999 W 19990330
• US 7997298 P 19980330

Abstract (en)
[origin: WO9949775A2] An echocardiography workstation which digitizes the video output of an ultrasound imaging system, such as a cardiac ultrasound imaging system, and applies noise reduction algorithms, which not only reduce excessive noise, but also enhance the definition of cardiac structures. The enhanced images undergo further processing by boundary detection algorithms to automatically identify the endocardial border and to track its movement through the cardiac cycle. Indices of cardiac function are automatically calculated by quantitation software, and the results are displayed in color-coded format in two or three dimensions for immediate review by the physician or technician. The quantitative measurements may be used to assess myocardial perfusion and other parameters indicative of the heart's function. A Help system assists the physician in the interpretation process, and an integrated expert system alerts the physician to various diagnostic possibilities that are consistent with the available data, including patient history and data from earlier studies that are stored in the workstation database. Reports are automatically generated based on the findings which are automatically generated and selected or modified by the physician. Similar techniques are used in imaging and evaluating other organs and internal anatomical structures.

IPC 1-7
G06K 9/00

IPC 8 full level
A61B 8/06 (2006.01); **A61B 8/08** (2006.01); **G01S 7/52** (2006.01); **G06T 7/20** (2006.01); **G16H 30/40** (2018.01); **G16H 50/50** (2018.01); **A61B 5/107** (2006.01)

CPC (source: EP US)
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Citation (search report)
See references of WO 9949775A2

Designated contracting state (EPC)
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