

Title (en)  
METHOD AND APPARATUS FOR AUTOMATIC SHAPE CHARACTERIZATION

Title (de)  
VERFAHREN UND GERÄT ZUR AUTOMATISCHEN FORMKARAKTERISIERUNG

Title (fr)  
PROCEDE ET APPAREIL DE CARACTERISATION DE FORMES AUTOMATIQUE

Publication  
**EP 1086440 A4 20060322 (EN)**

Application  
**EP 99927302 A 19990608**

Priority  
• US 9912698 W 19990608  
• US 8836798 P 19980608

Abstract (en)  
[origin: WO9964983A1] A method and apparatus for classifying population states based on shape characterizations of sub-manifolds of points, curves, surfaces, or sub-volumes. A structure is examined using, for example, clinical imaging techniques such as CT, MRI, or Ultrasound (601). The image is then subjected to a transform function to generate a map (602) of the new image. The new image map which contains information regarding the shape (604) of the structure is compared (606) to average shape characterizing population groups. If the shape of the new image falls within a best match probability with an average shape, the new image is classified (607) as a member of the population characterized by the average shape. Thus, if the shape of the new structure resembles the average shape of a population group, the new shape is classified as the same population state as the other structures displaying the same shape characteristics.

IPC 1-7  
**G06K 9/42**; **G06K 9/62**

IPC 8 full level  
**A61B 5/00** (2006.01); **A61B 5/055** (2006.01); **G06K 9/62** (2006.01); **G06T 7/00** (2006.01)

CPC (source: EP US)  
**G06F 18/28** (2023.01 - EP); **G06V 10/754** (2022.01 - EP US); **G06V 10/76** (2022.01 - EP US)

Citation (search report)  
• [X] US 5410613 A 19950425 - SUZUKI NORIYUKI [JP]  
• See references of WO 9964983A1

Designated contracting state (EPC)  
CH DE FR LI NL SE

DOCDB simple family (publication)  
**WO 9964983 A1 19991216**; **WO 9964983 A9 20000831**; AU 4424499 A 19991230; CA 2334272 A1 19991216; EP 1086440 A1 20010328; EP 1086440 A4 20060322; JP 2002517867 A 20020618

DOCDB simple family (application)  
**US 9912698 W 19990608**; AU 4424499 A 19990608; CA 2334272 A 19990608; EP 99927302 A 19990608; JP 2000553917 A 19990608