Title (en)

COMPUTED TOMOGRAPHIC COLONSCOPY

Title (de)

RECHNER UNTERSTÜTZTE TOMOGRAPHISCHE KOLONOSKOPIE

Title (fr)

COLOSCOPIE TOMOGRAPHIQUE ASSISTEE PAR ORDINATEUR

Publication

EP 0973433 A4 20000126 (EN)

Application

EP 95939881 A 19951016

Priority

- CA 2234767 A 19951016
- US 9514634 W 19951016

Abstract (en)

[origin: WO9714352A1] A generally non-invasive method of colon examination in which the patient's colon is first inflated with gas, and then a plurality of cross-sectional images of the colon are taken by CT scanning along the longitudinal axis of the abdomen. Sets of data corresponding to each cross-sectional image are stored in computer memory. These sets of data are processed by a first computer program that reconstructs a three-dimensional model of the entire colon. Data corresponding to the reconstructed three-dimensional model of the colon are also stored in computer memory. A second computer program processes the original sets of data and the three-dimensional model data to reconstruct, for successive thin segments along the length of the entire colon, a cross-sectional image for each segment which is perpendicular to the longitudinal axis of the colon lumen. These reconstructed images, which provide an exact simulation of the interior of the colon that would be viewed by means of colonoscopy, can be retrieved from memory and displayed for examination on a conventional video monitor, enabling the physician to detect any abnormalities of the colon wall anatomy which would tend to indicate the presence of an abnormality such as a polyp or tumor.

IPC 1-7

A61B 5/00; A61B 6/00; A61B 6/03

IPC 8 full level

A61B 5/00 (2006.01); **A61B 6/00** (2006.01)

CPC (source: EP)

A61B 6/032 (2013.01); **A61B 6/481** (2013.01)

Citation (search report)

- [A] DE 4405505 A1 19950831 - SIEMENS AG [DE]
- [A] C. GENE COIN ET AL.: "COMPUTERIZED RADIOLOGY OF THE COLON: A POTENTIAL SCREENING TECHNIQUE", COMPUTERIZED RADIOLOGY, vol. 7, no. 4, 1983, pages 215 - 221, XP002103948
- See also references of WO 9714352A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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