Title (en)

3PI ALGORITHM FOR SPIRAL CT

Title (de)

3PI-ALGORITHMUS FÜR SPIRAL-CT

Title (fr)

ALGORITHME 3PI POUR TOMOGRAPHIE INFORMATIQUE EN SPIRALE

Publication

EP 1576446 A4 20090218 (EN)

Application

EP 03812496 A 20031204

Priority

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- US 38953403 A 20030314

Abstract (en)

[origin: WO2004051431A2] Methods and systems for reconstructing images of moving objects being spirally scanned with two dimensional detectors with a 3PI algorithm. The moving objects can be scanned at a rate of up to approximately three times slower than those of pre-existing systems. In a preferred embodiment, the invention allows for a patient on a table moving through a spiral scanner to be slowed down by a factor of up to three, and still use the same size detector array as those in existing spiral scanning systems.

IPC 1-7

A61B 6/03

IPC 8 full level

A61B 6/03 (2006.01); **G06F 1/00** (2006.01); **G06T 11/00** (2006.01)

IPC 8 main group level

G06F (2006.01)

CPC (source: EP)

A61B 6/027 (2013.01); **G06T 11/005** (2013.01); G06T 2211/416 (2013.01); G06T 2211/421 (2013.01)

Citation (search report)

- [PX] EP 1308898 A2 20030507 - SIEMENS CORP RES INC [US]
- [XA] PROSKA, KÖHLER, GRASS, TIMMER: "The n-PI-method for Helical Cone-Beam CT", IEEE TRANSACTIONS ON MEDICAL IMAGING, vol. 19, no. 9, 1 October 2000 (2000-10-01), IEEE, pages 848 - 863, XP002509702, Retrieved from the Internet <URL:http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=00887834> [retrieved on 20090108]
- [XA] A. KATSEVICH: "Theoretically exact filtered backprojection-type inversion algorithm for spiral CT", SOCIETY FOR INDUSTRIAL AND APPLIED MATHEMATICS, vol. 62, no. 6, 3 July 2002 (2002-07-03), SIAM J. APPL. MATH., pages 2012 - 2026, XP002509703, Retrieved from the Internet <URL:http://digilander.libero.it/Spiral_CT/document/DOC_24.pdf> [retrieved on 20090108]
- See references of WO 2004051431A2

Designated contracting state (EPC)

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DOCDB simple family (publication)

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