Title (en)

HELICAL SCANNING CT-APPARATUS WITH MULTI-ROW DETECTOR ARRAY

Title (de)

RECHNERGESTEUERTES TOMOGRAPHISCHES GERÄT FÜR SPIRALABTASTEN MIT EINER ZWEIDIMENSIONALEN DETEKTORANORDNUNG

Title (fr)

APPAREIL DE TOMOGRAPHIE A BALAYAGE HELICOIDAL, AVEC UN AGENCEMENT DE DECTECTEURS DISPOSES EN UNE PLURALITE DE RANGEES

Publication

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Application

EP 94902207 A 19931103

Priority

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- US 92698792 A 19920807

Abstract (en)

[origin: EP1295560A2] An x-ray computed tomography system for helically scanning a patient, by translating the patient (42) as projections of the patient (42) at various beam angles are obtained, employs a detector array (16) having multiple rows displaced in along the direction of translation. The voxel attenuation values reconstructed from the multiple rows are combined to produce an image having an improved beam profile in along the translation direction. A cone beam reconstruction method, which accounts for the divergence of the rays of a fan beam (40) of x-rays, and helical scanning is used to further improve the slice profile. The voxels may be selected so that they cluster closely about the position of the desired slice plane. <IMAGE>

IPC 1-7

A61B 6/03; G06F 11/00

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CPC (source: EP)

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