

Title (en)

METHOD AND APPARATUS FOR PARALLEL DATA ACQUISITION FROM A MRI COIL ARRAY

Title (de)

VERFAHREN UND ANLAGE ZUR PARALLELEN DATENERFASSUNG AUS EINE MRI SPULENANORDNUNG

Title (fr)

PROCEDE ET APPAREIL D'ACQUISITION DE DONNEES EN PARALLELE A PARTIR D'UN RESEAU

Publication

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Application

EP 00937692 A 20000523

Priority

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Abstract (en)

[origin: WO0072050A1] Magnetic resonance data is acquired in parallel by an array of separate RF coils (2, 4, 6) arranged circumferentially around the imaging subject. The apparatus and method operate on the basis of determining an estimate of the sensitivity profile of each coil in the array.

IPC 1-7

G01V 3/00; G01R 33/561

IPC 8 full level

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CPC (source: EP)

G01R 33/3415 (2013.01); **G01R 33/5611** (2013.01)

Citation (search report)

- [YA] PRUESSMANN K P ET AL: "COIL SENSITIVITY ENCODING FOR FAST MRI", PROCEEDINGS OF THE INTERNATIONAL SOCIETY FOR MAGNETIC RESONANCE IN MEDICINE. 6TH SCIENTIFIC MEETING AND EXHIBITION. ISMRM '98. SYDNEY, APRIL 18 - 24, 1998, PROCEEDINGS OF THE INTERNATIONAL SOCIETY OF MAGNETIC RESONANCE IN MEDICINE. SCIENTIFIC MEETING, vol. VOL. 1, 1998, pages 579, XP001010818, ISSN: 1065-9889
- [YA] JAKOB P M ET AL: "AUTO-SMASH: A SELF-CALIBRATING TECHNIQUE FOR SMASH IMAGING", MAGNETIC RESONANCE MATERIALS IN PHYSICS, BIOLOGY AND MEDICINE, CHAPMAN AND HALL, LONDON, GB, vol. 7, no. 1, November 1998 (1998-11-01), pages 42 - 54, XP001012838, ISSN: 1352-8661
- [XA] MURAKAMI J W ET AL: "INTENSITY CORRECTION OF PHASED-ARRAY SURFACE COIL IMAGES", MAGNETIC RESONANCE IN MEDICINE, ACADEMIC PRESS, DULUTH, MN, US, vol. 35, no. 4, 1 April 1996 (1996-04-01), pages 585 - 590, XP000587727, ISSN: 0740-3194
- [A] PRUESSMANN, K.P. ET AL: "Coil Sensitivity Maps for Sensitivity Encoding and Intensity Correction", INTERNATIONAL SOCIETY FOR MAGNETIC RESONANCE IN MEDICINE, SIXTH SCIENTIFIC MEETING AND EXHIBITION, 18 April 1998 (1998-04-18), SYDNEY, AUSTRALIA, pages 2087, XP002270936
- [T] KYRIAKOS W E ET AL: "SENSITIVITY PROFILES FROM AN ARRAY OF COILS FOR ENCODING AND RECONSTRUCTION IN PARALLEL (SPACE RIP)", MAGNETIC RESONANCE IN MEDICINE, ACADEMIC PRESS, DULUTH, MN, US, vol. 44, no. 2, August 2000 (2000-08-01), pages 301 - 308, XP000947389, ISSN: 0740-3194
- See references of WO 0072050A1

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