

Title (en)

NMR RECEIVER WITH SIGMA-DELTA A/D CONVERTER.

Publication

**EP 0607299 A4 19940824 (EN)**

Application

**EP 92921798 A 19921006**

Priority

- US 9208491 W 19921006
- US 77336191 A 19911007

Abstract (en)

[origin: WO9307679A1] An NMR receiver (60) utilizing the Sigma-Delta modulation method implemented in the analog-to-digital converter (88) device to enable the use of much simpler analog anti-aliasing filters (86) that have a wider bandwidth. The analog filters do not induce phase distortion of the signal in the operating frequency and thus eliminates the need for first order phase correction by the digital signal processor. Further, there is no requirement for adjustment in the filters (86) since the digital decimation filter (88) contained within the analog-to-digital converter device (88) acts as a digital lowpass filter.

IPC 1-7

**H03M 3/00**

IPC 8 full level

**A61B 5/055** (2006.01); **G01R 33/32** (2006.01); **G01R 33/36** (2006.01); **H03M 3/02** (2006.01)

CPC (source: EP)

**G01R 33/3621** (2013.01)

Citation (search report)

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- [Y] US 4950999 A 19900821 - AGNELLO ANTHONY M [US], et al
- [Y] H.-J. DRESSLER: "Interpolative Bandpass - A/D - Conversion", SIGNAL PROCESSING. EUROPEAN JOURNAL DEVOTED TO THE METHODS AND APPLICATIONS OF SIGNAL PROCESSING, vol. 22, no. 2, February 1991 (1991-02-01), AMSTERDAM NL, pages 139 - 151, XP000208672
- See references of WO 9307679A1

Designated contracting state (EPC)

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