

Title (en)

METHODS OF AND APPARATUS FOR NQR TESTING A SAMPLE

Title (de)

VERFAHREN UND GERÄT FÜR DIE UNTERSUCHUNG EINER PROBE MITTELS KERNQUADRUPOLRERSONANZ

Title (fr)

PROCEDES ET DISPOSITIF PERMETTANT DE TESTER UN ECHANTILLON PAR RESONANCE QUADRIPOLAIRE NUCLEAIRE

Publication

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Application

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Abstract (en)

[origin: WO9919740A1] Methods of and apparatus for Nuclear Quadrupole Resonance (NQR) testing a sample containing quadrupolar nuclei exhibiting a given value of spin-lattice relaxation time, T<sub>1</sub>, are disclosed. The off-resonance and the sensitivity of the NQR test may be further improved by applying excitation (in the form of "bridging pulses") between the two excitation blocks. The method comprises applying two excitation blocks to excite nuclear quadrupole resonance, there being a given delay time between the two blocks, detecting resonance response signals, and comparing the response signals from respective blocks. The delay time is less than the T<sub>1</sub> value of the nuclei.

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