



Technology Transfer Opportunity

Low Power Imaging – LPI - NMR

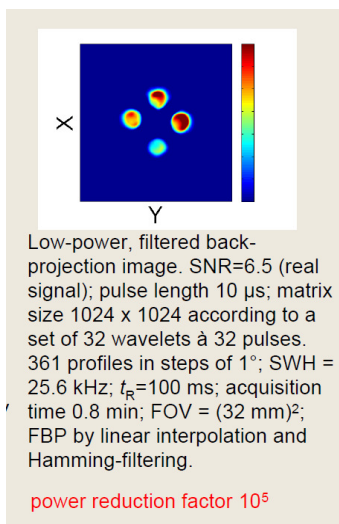
OPPORTUNITY:

Low Power Imaging – LPI - NMR

Description of Technology:

A new small flip-angle NMR technique based on continuous wavelets excitation has been developed and validated in the laboratory.

The new scheme results in extremely low power excitation levels, and signal amplitudes close to those obtained with traditional pulsed FT NMR.



Value Proposition:

- Up to **10^5 reduction** in NMR excitation power requirement.
- Eliminates need for bulky RF power source.
- Highly convergent with existing NMR equipment.
- Increased patient safety during MRI imaging.
- Enables NMR analysis of energy-sensitive materials (e.g. explosives).

Market:

All NMR equipment manufacturers seeking to exploit low power specifications enabled by the LPI technology:

- Portable NMR equipment.
- High-field MRI equipment manufacturers concerned with SAR issues and legislation.

Inventors:

Dr Marcus Greferath et al. (University College Dublin), and Professor Bernhard Bluemich et al. (RWTH Aachen University).

Status:

- Priority European Patent filed on 16/10/2008, entering PCT stage in October 2009.
- Technology demonstrated in the laboratory with commercial NMR equipment.

Opportunity Sought:

Technology available for licensing.

Licensing Contact:

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