



Method of Analyzing Diffusion-weighted Magnetic Resonance Imaging

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市場及需求：本技術為一創新的磁振造影擴散權重影像的分析方法,提供擴散影像訊號的量化分析,得以精確地顯現水分子擴散方向與幅度。具有獨創的技術及市場的可行性,有潛力應用於臨床擴散磁振影像分析或相關廠商的影像處理。

技術摘要(含成果)：擴散權重影像的相關造影技術眾多,但用於分析擴散權重影像的演算法,目前並無方法可以廣泛性且精確地分析水分子的擴散方向與幅度,因此開發擴散權重影像的量化分析方法,可應用於大腦白質神經纖維顯像技術。本技術能提供相當精確之大腦白質神經纖維分布方向與微環境結構的量化特性。

優勢：本技術可增進現有擴散權重影像的分析方法,具有良好之產品或技術之競爭性及市場的可行性。

競爭產品：傳統磁振擴散權重影像的分析方法仍相當有限。本技術提供良好且準確之影像分析技術,具有良好之產品競爭性及市場的可行性。

專利現況：

證書號：US 8,160,339 B2

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Market Needs: This method can provide an algorithm to quantify and qualify microstructural properties measured by diffusion weighted imaging. It is of potential to be a good product or technology competitiveness and the feasibility of the market by applying to the diffusion imaging related clinical departments and manufacturers.

Our Technology: The method used to analyze diffusion images continues to improve, but the general diffusion MRI analysis is not good enough in analytical efficiency and accuracy. Therefore, the development of diffusion MRI images analysis is critical and practical. The present invention is directed to providing a new algorithm which can effectively analyze diffusion MRI images and generate the accurate fiber orientation and quantified magnitude of diffusion probabilistic distribution. This method can provide a high performance of analyzing diffusion MRI images.

Strength: This method can provide better performance than the existing diffusion imaging analysis. It is with a good product or technology competitiveness and feasibility of the market.

Competing Products: Traditional diffusion magnetic resonance imaging analytical method is still quite limited. The present method provides a new algorithm to analyzing diffusion imaging efficiently and accurately.

Intellectual Properties:

Patent number: US 8,160,339 B2,

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