

Title (en)  
SYSTEMS AND METHODS FOR DETERMINISTIC EMITTER SWITCH MICROSCOPY

Title (de)  
SYSTEME UND VERFAHREN FÜR DETERMINISTISCHE EMITTER-SWITCH-MIKROSKOPIE

Title (fr)  
SYSTÈMES ET PROCÉDÉS DE MICROSCOPIE DÉTERMINISTE À COMMUTATION D'ÉMETTEURS

Publication  
**EP 2769417 A1 20140827 (EN)**

Application  
**EP 12842617 A 20121018**

Priority

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- US 201261591570 P 20120127
- US 201261624647 P 20120416
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Abstract (en)  
[origin: WO2013059404A1] Techniques for deterministic switch microscopy include resolving at least one nitrogen vacancy center in a diamond structure. A magnetic field can be applied across the diamond structure and the nitrogen vacancy centers can be optically excited. The nitrogen vacancy centers can be switched from a dark state to a bright state or a bright state by a dark state by applying at least one microwave pulse. A fluorescent response of each nitrogen vacancy center can be detected and a nitrogen vacancy center can be resolved based on the fluorescent response of each nitrogen vacancy center as it corresponds to the orientation of the nitrogen vacancy center relative to the applied magnetic field.

IPC 8 full level  
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CPC (source: EP)  
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Cited by  
US9829545B2; US9853837B2; US10126377B2; US10371760B2; US10006973B2; US10168393B2; US10466312B2; US10241158B2; US10338163B2; US10520558B2; US10012704B2; US10088336B2; US10359479B2; US10277208B2; US10345396B2; US10379174B2; US10408889B2; US9823314B2; US9910105B2; US10725124B2; US9835694B2; US9835693B2; US10145910B2; US10274550B2; US9823313B2; US9845153B2; US10281550B2; US9824597B2; US10317279B2; US10338164B2; US9638821B2; US9823381B2; US9910104B2; US10088452B2; US10228429B2; US10345395B2; US10120039B2; US10338162B2; US10571530B2; US9614589B1; US10330744B2; US10333588B2; US10371765B2; US10408890B2; US10459041B2; US10527746B2; US10677953B2

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