

Title (en)  
CONVERGENT NANOFABRICATION & NANOASSEMBLY METHODS, MEANS & APPLICATIONS THEREOF, PRODUCTS & SYSTEMS THEREFROM INCLUDING METHODS AND MEANS FOR CONVERSION OF POLLUTANTS TO USEFUL PRODUCTS

Title (de)  
KONVERGENTE NANOHERSTELLUNGS- UND NANOASSEMBLIERUNGSVERFAHREN, VORRICHTUNG UND ANWENDUNG DAVON, PRODUKTE UND SYSTEME DARAUS UND MITTEL ZUR UMWANDLUNG VON SCHADSTOFFEN IN NÜTZLICHE PRODUKTE

Title (fr)  
PROCÉDÉS DE NANOFABRICATION ET DE NANOASSEMBLAGE CONVERGENTS, MOYENS ET APPLICATIONS ASSOCIÉS, PRODUITS ET SYSTÈMES ÉMANANT DE CEUX-CI COMPRENANT DES PROCÉDÉS ET DES MOYENS DE CONVERSION DE POLLUANTS EN PRODUITS UTILES

Publication  
**EP 3902767 A4 20230301 (EN)**

Application  
**EP 19875294 A 20191022**

Priority  
• US 201862749117 P 20181022  
• US 2019057505 W 20191022

Abstract (en)  
[origin: WO2020086632A1] Novel methods and means for convergent nanofabrication and nanoassembly are disclosed, and systems produced by and performing same are targeted at a broad range of applications. Molecules and/or nanostructures are bound to supported binding means and manipulated to translate such precursors or intermediates to bond together in precisely desired locations and orientations to yield desired precise structures. Methods and means suitable for precise fabrication of a range of materials including diamond, Beta-Silicon-Carbide and related materials, and precise modifications thereof such as color centers in predetermined configuration for quantum computation and information processing and storage applications, and for precise fabrication of halite structured materials including MgO, MgS, TiC, VN, ScN, precisely Mn doped ScN, NbN, HfC, TaC, Hf<sub>x</sub>Ta<sub>y</sub>C, AbOS, SrO. BaO, ZrO<sub>2</sub>, ZrC, ZrN, HfN, and also metals including refractory metals such as W are disclosed, yielding an extremely broad range of materials and materials properties which may be availed or utilized.

IPC 8 full level  
**B82B 3/00** (2006.01); **B82Y 30/00** (2011.01); **B82Y 40/00** (2011.01)

CPC (source: EP IL)  
**B82B 3/0004** (2013.01 - EP IL); **B82Y 30/00** (2013.01 - IL); **B82Y 40/00** (2013.01 - IL); **B82Y 30/00** (2013.01 - EP); **B82Y 40/00** (2013.01 - EP)

Citation (search report)  
• [A] US 2009056802 A1 20090305 - RABANI ELI MICHAEL [US]  
• See references of WO 2020086632A1

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
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