Title (en)

REDUCING THE COULOMBIC BARRIER TO INTERACTING REACTANTS

Title (de)

VERRINGERUNG DER COULOMBISCHEN BARRIERE ZUR INTERAKTION VON REAKTANDEN

Title (fr)

RÉDUCTION DE LA BARRIÈRE DE COULOMB EN RÉACTIFS INTERAGISSANTS

Publication

EP 3622532 A4 20210120 (EN)

Application

EP 18798890 A 20180504

Priority

- US 201715589902 A 20170508
- US 201715589913 A 20170508
- US 201715589886 A 20170508
- US 201715589905 A 20170508
- US 201762503680 P 20170509
- US 2018031244 W 20180504

Abstract (en)

[origin: WO2018208623A1] Methods, apparatuses, devices, and systems for producing and controlling and fusion activities of nuclei. Hydrogen atoms or other neutral species (neutrals) are induced to rotational motion in a confinement region as a result of ion-neutral coupling, in which ions are driven by electric and magnetic fields. The controlled fusion activities cover a spectrum of reactions including aneutronic reactions such as proton-boron-11 fusion reactions.

IPC 8 full level

G21B 1/19 (2006.01); **G21B 1/03** (2006.01); **G21B 1/05** (2006.01); **G21B 1/11** (2006.01); **H05H 1/02** (2006.01); **H05H 1/16** (2006.01)

CPC (source: EP KR)

G21B 3/006 (2013.01 - EP KR); **H05H 1/02** (2013.01 - EP); **H05H 1/12** (2013.01 - KR); **H05H 1/16** (2013.01 - EP KR); **H05H 6/00** (2013.01 - KR); Y02E 30/10 (2013.01 - EP KR)

Citation (search report)

- [I] US 2014219407 A1 20140807 - WONG ALFRED Y [US]
- [I] US 2015380113 A1 20151231 - WONG ALFRED Y [US], et al
- [A] US 2005129160 A1 20050616 - INDECH ROBERT [US]
- [A] US 2016314856 A1 20161027 - PINNOW DOUGLAS ARTHUR [US]
- [A] F.C. BARKER: "Electron screening in reactions between light nuclei", NUCLEAR PHYSICS., vol. 707, no. 1-2, 1 August 2002 (2002-08-01), NL, pages 277 - 300, XP055760045, ISSN: 0375-9474, DOI: 10.1016/S0375-9474(02)00921-1
- See also references of WO 2018208623A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2018208623 A1 20181115; CA 3063114 A1 20181115; CN 111133528 A 20200508; EP 3622532 A1 20200318; EP 3622532 A4 20210120; JP 2020519892 A 20200702; JP 2022191419 A 20221227; JP 7478793 B2 20240507; KR 20200032670 A 20200326; KR 20240005998 A 20240112

DOCDB simple family (application)

US 2018031244 W 20180504; CA 3063114 A 20180504; CN 201880045758 A 20180504; EP 18798890 A 20180504; JP 2019562358 A 20180504; JP 2022165879 A 20221014; KR 20197036299 A 20180504; KR 20237044809 A 20180504