

CORRECTED VERSION

(19) World Intellectual Property  
Organization  
International Bureau



(10) International Publication Number  
**WO 2017/106601 A8**

(43) International Publication Date  
22 June 2017 (22.06.2017)

(51) International Patent Classification:

*B01J 35/08* (2006.01)      *H05H 1/48* (2006.01)  
*B05D 1/02* (2006.01)      *F26B 3/04* (2006.01)  
*C03B 19/10* (2006.01)      *F26B 3/12* (2006.01)  
*C23C 4/134* (2016.01)

(21) International Application Number:

PCT/US2016/067100

(22) International Filing Date:

16 December 2016 (16.12.2016)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/268,186 16 December 2015 (16.12.2015) US

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(81) Designated States (*unless otherwise indicated, for every  
kind of national protection available*): AE, AG, AL, AM,  
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,  
BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM,  
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,

HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KH, KN,  
KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA,  
MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG,  
NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS,  
RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY,  
TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,  
ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every  
kind of regional protection available*): ARIPO (BW, GH,  
GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ,  
TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU,  
TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE,  
DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU,  
LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,  
SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a  
patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the  
earlier application (Rule 4.17(iii))*

Published:

- *with international search report (Art. 21(3))*

(48) Date of publication of this corrected version:

27 July 2017

(15) Information about Correction:

see Notice of 27 July 2017

(54) Title: SPHEROIDAL DEHYDROGENATED METALS AND METAL ALLOY PARTICLES

(57) Abstract: Methodologies, systems, and devices are provided for producing metal spheroidal powder products. Dehydrogenated and spheroidized particles are prepared using a process including introducing a metal hydride feed material into a plasma torch. The metal hydride feed material is melted within a plasma in order to dehydrogenate and spheroidize the materials, forming dehydrogenated and spheroidized particles. The dehydrogenated and spheroidized particles are then exposed to an inert gas and cooled in order to solidify the particles into dehydrogenated and spheroidized particles. The particles are cooled within a chamber having an inert gas.



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