

Title (en)
AT LEAST PARTLY FUSED PARTICULATES AND METHODS OF MAKING THEM BY FLAME FUSION

Title (de)
TEILGESCHMOLZENE PARTIKEL UND IHR HERSTELLUNGSVERFAHREN MITTELS FLAMMENSCHMELZEN

Title (fr)
MATERIAUX PARTICULAIRES AU MOINS PARTIELLEMENT FONDUS ET PROCEDES DE FABRICATION DESDITS MATERIAUX PAR DOUBLAGE A LA FLAMME

Publication
EP 0858435 A1 19980819 (EN)

Application
EP 96940250 A 19961031

Priority

- US 9616967 W 19961031
- US 719595 P 19951101
- US 55213895 A 19951102
- US 9615148 W 19960920

Abstract (en)
[origin: WO9716384A1] The disclosure describes methods for producing bulk, particulate material that includes solid, generally ellipsoidal particles. Irregularly shaped feed particles with average particle sizes of up to 25 microns on a volume basis are dispersed in at least a portion of a combustible gas mixture by application of force and/or fluidizing agents. The combustible mixture with particles in suspension is then delivered, while controlling agglomeration or re-agglomeration of the particles, to at least one flame front. There, the mixture and suspended particles are uniformly distributed across the surface(s) of and passed through the flame front(s) with a high concentration of particles in the mixture. This flame front and the resultant flame(s) with suspended particles are located in at least one "wall free" zone. In such zone(s) the flame(s) may expand while the particles are maintained in dispersion and heated, with controlled and highly efficient application of heating energy. At least partial fusion occurs within at least the surfaces of the particles at high thermal efficiencies, while agglomeration of particles during fusion is inhibited.

IPC 1-7
C03C 12/00; **C03B 19/10**

IPC 8 full level
B01J 2/16 (2006.01); **B01J 6/00** (2006.01); **B01J 8/18** (2006.01); **C03B 19/10** (2006.01); **C03C 12/00** (2006.01)

CPC (source: EP KR)
B01J 2/16 (2013.01 - EP KR); **B01J 6/005** (2013.01 - EP KR); **B01J 8/18** (2013.01 - EP KR); **C03B 19/102** (2013.01 - EP KR); **C03C 12/00** (2013.01 - EP KR); **Y02P 40/57** (2015.11 - EP KR)

Citation (search report)
See references of WO 9716385A1

Cited by
US9444549B2; US9793994B2

Designated contracting state (EPC)
BE CH DE DK ES FR GB IT LI NL SE

DOCDB simple family (publication)
WO 9716384 A1 19970509; AU 707863 B2 19990722; AU 7115396 A 19970522; AU 718188 B2 20000406; AU 7718596 A 19970522; BR 9611150 A 19990330; BR 9611506 A 19990511; CA 2236444 A1 19970509; CN 1201443 A 19981209; CN 1201444 A 19981209; DE 69619390 D1 20020328; DE 69619390 T2 20020711; EP 0858434 A1 19980819; EP 0858434 B1 20020220; EP 0858435 A1 19980819; ES 2169265 T3 20020701; JP H11514963 A 19991221; KR 19990067323 A 19990816; KR 19990067324 A 19990816; MX 9803454 A 19980930; NO 981900 D0 19980427; NO 981900 L 19980701; NO 981929 D0 19980428; NO 981929 L 19980701; WO 9716385 A1 19970509

DOCDB simple family (application)
US 9615148 W 19960920; AU 7115396 A 19960920; AU 7718596 A 19961031; BR 9611150 A 19960920; BR 9611506 A 19961031; CA 2236444 A 19960920; CN 96198075 A 19960920; CN 96198076 A 19961031; DE 69619390 T 19960920; EP 96932298 A 19960920; EP 96940250 A 19961031; ES 96932298 T 19960920; JP 51733097 A 19960920; KR 19980703322 A 19980430; KR 19980703323 A 19980430; MX 9803454 A 19961031; NO 981900 A 19980427; NO 981929 A 19980428; US 9616967 W 19961031