

Title (en)

PULVERIZED SOLID FUEL BURNING APPARATUS.

Title (de)

FEUERUNGSVORRICHTUNG FÜR PULVERFESTBRENNSTOFFE.

Title (fr)

BRULEUR DE COMBUSTIBLE SOLIDE PULVERISE.

Publication

**EP 0118455 A4 19850730 (EN)**

Application

**EP 83901967 A 19830411**

Priority

US 37834782 A 19820514

Abstract (en)

[origin: WO8304085A1] A system for pulverizing and burning solid fuel, such as coal or other fossil fuel, characterized by a possible turndown ratio of up to as least one to fifteen, includes a unique pulverizer (12) capable of both impact and autogenous pulverizing, and a unique burner (14) which includes a valve firing nozzle having a firing conduct (48) with firing orifice (49) and controlled secondary air supply (16, 16a, 54, 59). A movable valve element (50), preferably in the form of double-taper-ended body, positioned downstream from the firing orifice (49) passes a turbulent stream of mixed primary and secondary, in which are suspended particles of the pulverized fuel, into an ignition chamber (55) and controls flame shape.

IPC 1-7

**F23D 1/00; F23K 1/00**

IPC 8 full level

**B02C 13/18** (2006.01); **F23D 1/00** (2006.01); **F23K 1/00** (2006.01); **F23K 3/02** (2006.01)

CPC (source: EP KR)

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**F23K 2201/10** (2013.01 - EP)

Citation (search report)

- [Y] GB 329963 A 19300527 - JOHN GRAVES MCKEAN, et al
- [Y] US 1721879 A 19290723 - EDWARD HAZLEHURST HENRY, et al
- [A] US 3934522 A 19760127 - BOOKER LEONARD
- [A] US 1841587 A 19320119 - FINN STEPHEN M
- [A] US 1713297 A 19290514 - OTTO OLSTON
- [A] GB 317710 A 19301030 - GEORGE FRANCIS PETTINOS
- [A] GB 1086519 A 19671011 - STEINMUELLER GMBH L & C
- [A] FR 589749 A 19250604
- [A] DE 364 C - C MEHLER MASCHF
- [A] GB 795887 A 19580604 - BAYER AG
- [A] FR 2348438 A1 19771110 - COLMANT CUVELIER [FR]
- [A] GB 352516 A 19310713 - ARTHUR DOCKING, et al
- [A] US 1676511 A 19280710 - WOOD WILFRED R

Designated contracting state (EPC)

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**WO 8304085 A1 19831124**; AU 1604983 A 19831202; AU 566176 B2 19871008; AU 601469 B2 19900913; AU 601470 B2 19900913;  
AU 7715387 A 19871126; AU 7715487 A 19871126; CA 1203435 A 19860422; DE 3371938 D1 19870709; EP 0118455 A1 19840919;  
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