

Title (en)

COMBUSTION PROCESS AND APPARATUS PARTICULARLY SUITED FOR THE COMBUSTION OF HEAVY FUEL

Publication

**EP 0128792 B1 19870729 (FR)**

Application

**EP 84400994 A 19840516**

Priority

FR 8308393 A 19830520

Abstract (en)

[origin: US4526529A] The clean combustion of a combustible material is facily carried out by (i) in situ generating a dispersing first stream of hot combustion gases by establishing a first downstream axially extending, axially symmetrical helical flowstream of combustion-supporting gases in a first combustion reaction zone and by introduction and combustion of a combustible fluid feedstream therein, (ii) serially directly contacting and intimately admixing the material cleanly combustible hereby with said first stream of hot combustion gases at a zone of reduced pressure thereof defining the inlet end of a second combustion reaction zone and whereat and downstream thereof said first stream of hot combustion gases is also in the configuration of an axially symmetrical helical flowstream, (iii) the amounts of said combustion-supporting gases and said combustible fluid being such as to effect essentially instantaneous dispersion and entrainment of fine particles of said cleanly combustible material at and downstream of said point of direct contact with said first stream of hot combustion gases, (iv) establishing a second downstream axially extending, axially symmetrical helical flowstream of combustion-supporting gases in said second combustion reaction zone, and (v) whereby said cleanly combustible material dispersed and entrained within said first stream of hot combustion gases is introduced into and combusted within said second stream of combustion-supporting gases in said second combustion reaction zone.

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IPC 8 full level

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CPC (source: EP US)

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Cited by

FR2935041A1; EP2784387A3; US5158445A; EP0834039A4; EP0598639A1; FR2698156A1; US5817909A; EP0463277A1; EP0232658A1; FR2592321A1; US4931012A; EP2784387A2; WO0032988A1; WO2010018347A1

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