

Title (en)

Circulating fluidized bed reactor with heat exchange surface extensions

Title (de)

Zirkulierender Wirbelschichtreaktor mit Wärmeaustauschflächenerweiterungen

Title (fr)

Réacteur à lit fluidisé circulant à extensions de surface d'échange thermique

Publication

EP 0653588 B1 19970723 (FR)

Application

EP 94402508 A 19941107

Priority

FR 9313476 A 19931110

Abstract (en)

[origin: EP0653588A1] The present invention relates to a circulating fluidized bed reactor including a lower region (3) equipped with a fluidization grid (11), with means for injecting primary air (12) below the grid (11), with means for injecting secondary air (13) above the grid (11) and with means for introducing fuel (10), the walls (5) surrounding this lower region being equipped with heat-exchange tubes, and an upper region (2) surrounded by walls (4) provided with heat-exchange tubes (9), the heat-exchange tubes (9) being joined together by fins (30). The walls of the said regions (2, 3) are equipped with vertical heat-exchange panels known as extensions (14) fixed perpendicularly to the walls (4, 5) of the regions (2, 3) these extensions being formed of tubes (15) internal to the reactor, of a horizontal width of between 150 and 500 mm and spaced apart by a distance of between 1.5 and 4 times their width, this width being defined as the distance between the internal face of the fins (30) of the walls (4, 5) and the furthermost generatrix of the furthermost tube of the extensions. <IMAGE>

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