

Title (en)
LEVELLING APPARATUS

Publication
EP 0111220 A3 19860326 (DE)

Application
EP 83111754 A 19831124

Priority
DE 3245552 A 19821209

Abstract (en)
[origin: US4491505A] A coal-leveling apparatus includes a leveling rod supported by a pressing machine for movement through a leveling opening into a mushroom-shaped gas-collecting space to level the coal charged in the coking chamber of a coke oven. The leveling rod includes a head element that carries two support members that can move on pivot levers between an operative position wherein the support members are extended from the head element for support by upwardly-inclined wall surfaces in the mushroom-shaped gas-collecting space. In the inoperative position, the support members are retracted toward both sides of the head element. An actuating rod extends through the leveling rod to the head element. In one embodiment, the actuating rod can be moved in opposite directions of its length. An end of each of the first pivot levers is connected to the actuating rod and the opposite ends of the first levers are connected to second pivot levers. The second pivot levers are connected at one end to the head element and carry the support members. The connection between the pivot levers and the actuating rod, in one embodiment, is by a pivot connection, and in another embodiment by rollers that can move along an inclined surface on an end of the actuating rod. In a third embodiment a nut is threadedly engaged with threads on the end portion of the actuating rod to move the levers.

IPC 1-7
C10B 37/02

IPC 8 full level
C10B 37/02 (2006.01)

CPC (source: EP US)
C10B 37/02 (2013.01 - EP US)

Citation (search report)

- [Y] DE 632320 C 19360706 - KOPPERS GMBH HEINRICH
- [Y] DE 691364 C 19400524 - KOPPERS GMBH HEINRICH
- [A] DE 279307 C
- [A] US 1769236 A 19300701 - SCHELLENTRAGER EUGENE W

Cited by
WO0002976A1

Designated contracting state (EPC)
FR GB NL

DOCDB simple family (publication)
EP 0111220 A2 19840620; EP 0111220 A3 19860326; DE 3245552 A1 19840614; DE 3245552 C2 19850613; IN 158919 B 19870221; JP S59109580 A 19840625; US 4491505 A 19850101

DOCDB simple family (application)
EP 83111754 A 19831124; DE 3245552 A 19821209; IN 1547CA1983 A 19831219; JP 22454383 A 19831130; US 55802183 A 19831205