Title (en)

DEVICE AND METHOD FOR WET CLEANING OF COKING FURNACES

Publication

EP 0150819 B1 19890614 (DE)

Application

EP 85100730 A 19850125

Priority

- DE 3402920 A 19840128
- DE 3439457 A 19841027
- DE 3439458 A 19841027

Abstract (en)

[origin: US4690160A] The sealing surfaces of a coke oven door are cleaned with high-pressure fluid by a hydraulically operated high-pressure piston pump which displaces either a hot or a cool conveyed media ladened with solid particles such as a coal mass and a fluid for cleansing the sealing surfaces of the coke oven doors and door frames. The pump includes a closed pump cylinder having an inlet and outlet valve for a conveyed medium at both ends of the cylinder and a partition dividing the cylinder. Inlet and outlet valves for hydraulic fluid are located in the cylinder on each side of the partition. An inner double piston is axially movable to and fro with the cylinder and comprises two output piston portions with a piston rod connected to each portion and located between them guided on bearings in the cylinder. A delivery space is formed between the piston portions and each end of the pump cylinder and the respective delivery spaces at each end simultaneously and oppositely decrease and increase during an operation. The hydraulic space is formed between the piston portions at each side of the partition and the hydraulic space also simultaneously and oppositely increase and decrease during operation. The pump is connected to a coke door cleaning apparatus for the purpose of cleaning an annular sealing surface. The apparatus includes a generally rectangular annular sealing surface trackway around the sealing surfaces of the door and a support structure adjacent the sealing surface having a sliding support surface trackway adjacent the door. A sliding support moves over the support surface. A nozzle lance is carried on the support and has an end with a nozzle directed at the sealing surface and an opposite end with a cleaning liquid connection through a hose to the high-pressure piston pump.

IPC 1-7

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IPC 8 full level

C10B 43/08 (2006.01); **F04B 9/115** (2006.01); **F04B 15/02** (2006.01); **F04B 53/14** (2006.01)

CPC (source: EP US)

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