

Title (en)

Coke drum with gate valve provided with pipe bridge

Title (de)

Verkokungstrommel mit einem Rohrbrückenschieber

Title (fr)

Récipient à coke avec un robinet-vanne pourvu d'un pont tubulaire

Publication

EP 1516908 A1 20050323 (DE)

Application

EP 04022218 A 20040917

Priority

DE 10343298 A 20030918

Abstract (en)

To the outlet, inlet and/or access openings of a coking drum (3, 4), a pipe-bridging slide-plate valve is fitted as a shut-off valve (11). Valve closure plates (27, 28) have mutually-parallel, solid metal, sealing seats (24, 25) which seal against surfaces with hard cladding, made from wear- and corrosion-resistant material. The plates both move inside a spectacle casing. A pipe bridging section unites two pipe sections (22, 23) in the open position, one leading to the interior of the coking drum. The bridging section is a hollow circular cylinder with smooth internal surface. It is hard-plated internally to resist wear and corrosion, or is hardened. The valve closure plates are pressed onto the sealing surfaces in the closed position, by a ball-centered wedge section. A guide plate (45) associated with the valve closure plates is in constant metallic contact with the valve casing. The valve operating rod is sealed to slide in and out of the casing. A gas pressurization connection (44) is provided for the rod sealing chamber, this supplies sealing- or flushing gas. A drive actuator mounting is provided. Wear compensation is provided in the open position of the valve, by a wavy- or bellows-type tube section, which fits around the pipe bridging section; it is fixed to one ring, but has axial freedom of motion w.r.t the other. An independent claim is included for the corresponding coking process.

Abstract (de)

Verkokungstrommel 3, 4, insbesondere für die Herstellung von Petroleumkoks, die einen annähernd zylindrischen Grundkörper, mindestens einen Einlaß und mindestens zwei Auslässe aufweist, wobei mindestens an einem Auslaß und/oder dem/einem Einlaß ein Rohrbrückenschieber als Absperrglied 11 angeordnet ist, der zwei Absperrplatten 27, 28 aufweist. <IMAGE>

IPC 1-7

C10B 25/10

IPC 8 full level

C10B 1/04 (2006.01); **C10B 25/10** (2006.01)

CPC (source: EP US)

C10B 1/04 (2013.01 - EP US); **C10B 25/10** (2013.01 - EP US)

Citation (search report)

- [DA] WO 02072729 A1 20020919 - CURTISS WRIGHT FLOW CONTROL [US]
- [A] EP 0450646 A2 19911009 - ZIMMERMANN & JANSEN GMBH [DE]
- [PX] US 2004154913 A1 20040812 - LAH RUBEN F [US]

Cited by

EP2626403A1; DE102012101015A1; DE102018116738A1; CN102678955A; CN105822782A; CN102392900A; CN102678954A; EP1929190A4; DE102012101015B4; US9109706B2

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