9900291-7

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : C10B 33/14

A1

(11) International Publication Number: WO 98/03611

(43) International Publication Date: 29 January 1998 (29.01.98)

(21) International Application Number: PCT/US97/12303

(22) International Filing Date: 9 July 1997 (09.07.97)

(30) Priority Data:
08/683,844 19 July 1996 (19.07.96) US

(71) Applicant: FOSTER WHEELER USA CORPORATION [US/US]; Perryville Corporate Park, Clinton, NJ 08809-4000 (US).

(72) Inventors: MALSBURY, Allen, S.; 161 Atlantic Drive, Parsippany, NJ 07054 (US). MYSZKA, Ronald, T.; 3301 Valley View Drive, Bethlehem, PA (US). KALINOSKY, Joseph, A.; 3015 Suncrest Drive, Allentown, PA 18104 (US).

(74) Agent: WILLIS, Charles, L.; Foster Wheeler Corporation, Perryville Corporate Park, Clinton, NJ 08809-4000 (US).

(81) Designated States: AU, AZ, BR, BY, CA, CN, CZ, DE, ES, FI, GB, GE, JP, KG, KR, KZ, LT, MX, NO, PL, PT, RO, RU, SE, SG, TR, UA, UZ, YU, Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published
With international search report.

(54) Title: COKING VESSEL UNHEADING DEVICE AND SUPPORT STRUCTURE

(57) Abstract

An unheading device for removable attachment onto a lower flanged opening (11) of a vertically-oriented vessel such as a coking drum (10), the unheading device being controllably supported by multiple elongated vertically-extendable actuators (22) such as hydraulic cylinders which extend between a lifting frame unit (20) holding a head unit (14) and the vessel support structure (12). The multiple vertically-extendable actuators are each pivotably attached at their lower ends to the lifting frame unit, and are each pivotably attached at their upper ends to the stationary support structure for the vessel. The unheading device is adapted for lowering the head unit and moving it laterally aside to a parking position on a platform portion (12a) of the vessel support structure, then raising the lifting frame unit with its attached decoking chute (16) unit to contact the vessel lower flanged opening for coke removal therefrom.

