

Title (en)
Steel tube for industrial kilns

Title (de)
Stahlrohr für Industrieöfen

Title (fr)
Tube en acier pour fours industriels

Publication
EP 0727631 B1 20020828 (DE)

Application
EP 96100133 A 19960108

Priority
DE 19505401 A 19950217

Abstract (en)
[origin: DE19505401C1] The pipe (7) is sealed at one end to a flange. Sealing is by a thin-walled metal sleeve (25), one section (40) of which is shrunk onto the pipe. This section is sealed via a second one (42, 46) to the larger-diameter flange. Parts at least of the second section can taper, and the sleeve can be welded to the flange. Its shrunk-on portion can be clear of the flange, and the pipe can be of silicon-carbide ceramic. The sleeve wall thickness can be less than 1 mm. It can have a coefficient of expansion equal to or less than that of the ceramic used, at least over the temperature range between ambient and operating temperatures.

IPC 1-7
F27D 23/00; H05B 3/04; F16J 15/08; F23C 3/00

IPC 8 full level
F23D 14/12 (2006.01); **F16J 15/08** (2006.01); **F23C 3/00** (2006.01); **F27D 99/00** (2010.01); **H05B 3/04** (2006.01)

CPC (source: EP US)
F23C 3/002 (2013.01 - EP US); **Y10S 165/057** (2013.01 - EP)

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
DE 19505401 C1 19960404; DE 59609581 D1 20021002; EP 0727631 A1 19960821; EP 0727631 B1 20020828; JP 3665407 B2 20050629; JP H08312924 A 19961126; US 5762489 A 19980609

DOCDB simple family (application)
DE 19505401 A 19950217; DE 59609581 T 19960108; EP 96100133 A 19960108; JP 3101696 A 19960219; US 60107696 A 19960212