

Title (en)

Single-ended radiant tube.

Title (de)

Einfach endendes Strahlungsheizrohr.

Title (fr)

Tube radiant avec une seule extrémité.

Publication

EP 0117029 A1 19840829 (EN)

Application

EP 84300103 A 19840109

Priority

GB 8301274 A 19830118

Abstract (en)

To reduce heat transfer to the flame tube 2 adjacent to the burner 5, vanes 19 are associated with the burner which cause combustion air to swirl before it mixes with gas from the burner and produce a vortex which encourages the gas to flow, and the flame to extend, centrally of the flame tube adjacent to the burner, and also cause air to surround the flame adjacent to the burner. In one embodiment the air is divided by a cowl 23 into a primary stream which passes through the vanes and a secondary stream which passes over the cowl and surrounds the flame adjacent to the burner. By means of an air shroud 23 the air is caused to converge towards the central axis of the flame tube as it approaches the vanes. The flame length can be varied by adjusting the distance between the shroud and the burner.

IPC 1-7

F23C 3/00; F23D 15/00

IPC 8 full level

F23C 3/00 (2006.01); **F23D 14/24** (2006.01)

CPC (source: EP)

F23C 3/002 (2013.01); **F23D 14/24** (2013.01)

Citation (search report)

- [XP] US 4401099 A 19830830 - COLLIER DAVID W [GB]
- [Y] FR 2403518 A1 19790413 - AICHELIN FA J [DE]
- [Y] DE 1950077 A1 19700827 - THERMO ELECTRON CORP
- [A] DE 3021924 A1 19811224 - BUCHTAL GMBH [DE]
- [A] DE 2448977 A1 19760429 - HOTWORK LTD

Cited by

EP0243506A4; EP1808641A1; CN106051769A; WO2010045196A3; US8408197B2; US8899224B2

Designated contracting state (EPC)

DE FR IT NL

DOCDB simple family (publication)

EP 0117029 A1 19840829; EP 0117029 B1 19870107; CA 1239865 A 19880802; DE 3461951 D1 19870212; GB 8301274 D0 19830216

DOCDB simple family (application)

EP 84300103 A 19840109; CA 445563 A 19840118; DE 3461951 T 19840109; GB 8301274 A 19830118