

Title (en)  
ROOM HEATING DEVICE

Publication  
**EP 0503489 A3 19930324 (DE)**

Application  
**EP 92103819 A 19920306**

Priority  
DE 9103004 U 19910315

Abstract (en)  
[origin: JPH05248705A] PURPOSE: To constitute a vortex motion zone in a mixed pressure chamber housing, while a high-temperature core part in the zone of a burner is surrounded by an air layer, where gas which flows backward is cooled to generate uniform thermal radiation in large space by a radiation tube. CONSTITUTION: In a room-heating device, the radiation tube of a conduit system arranged at the upper part of space to be heated is connected to a mixed pressure chamber housing 1. In this case, the radiation tube is connected to a backward flow chamber 19 with a ventilator 10 and at the same time is connected to a mixing chamber 20 with flame tube 14 for surrounding a burner 2. The mixing pressure chamber housing 1 is formed in a double-volute shape. In this case, two cylindrical parts form the housing, front and back plates 3 and 4 have double-vortex shapes, and connection tubes 18 and 21 to the radiation tube are connected to the back plate 4. A drive unit 5 for a burner 2 and the ventilator 10 is arranged on the front plate 3.

IPC 1-7  
**F24D 5/00**

IPC 8 full level  
**F24H 3/04** (2006.01); **F24D 5/00** (2006.01); **F24D 5/08** (2006.01)

CPC (source: EP KR US)  
**F24D 5/00** (2013.01 - EP US); **F24D 5/08** (2013.01 - EP US); **F24H 3/00** (2013.01 - KR)

Citation (search report)

- [X] DE 3814897 A1 19891116 - KOCH CHRISTIAN [DE]
- [A] DE 9017116 U1 19910307
- [A] EP 0244639 A2 19871111 - JOHNSON ARTHUR C W

Cited by  
EP4345382A1; EP0647819A1; WO9517633A1; DE102022124936A1

Designated contracting state (EPC)  
DE FR IT SE

DOCDB simple family (publication)  
**DE 9103004 U1 19910613**; CS 57692 A3 19921014; EP 0503489 A2 19920916; EP 0503489 A3 19930324; HU 9200852 D0 19920528; HU T61091 A 19921130; JP H05248705 A 19930924; KR 100216387 B1 19990816; KR 920018425 A 19921022; PL 293682 A1 19921005; US 5273210 A 19931228

DOCDB simple family (application)  
**DE 9103004 U 19910315**; CS 57692 A 19920227; EP 92103819 A 19920306; HU 9200852 A 19920313; JP 3765992 A 19920225; KR 920004133 A 19920313; PL 29368292 A 19920303; US 84834892 A 19920309