

Title (en)  
Cooled panel for furnaces.

Title (de)  
Kühlelement für einen Ofen.

Title (fr)  
Panneau de four refroidi.

Publication  
**EP 0140401 A1 19850508 (EN)**

Application  
**EP 84201172 A 19840814**

Priority  
IT 8346383 A 19830919

Abstract (en)  
This invention concerns a cooled panel (10) for furnaces, which comprises a plurality of tubes (11) arranged in a coil and connected at their ends with elbow unions (13), and in which the neighbouring tubes (11) have, at least along a tract lengthwise to the tubes themselves, a free gap (19) between them for the purpose of assisting thermal expansion in the panel (10).

IPC 1-7  
**F27D 1/12**; **F27D 9/00**; **C21B 7/10**; **F27B 3/24**; **F27B 1/24**

IPC 8 full level  
**F27B 3/24** (2006.01); **F27D 1/12** (2006.01); **F27D 9/00** (2006.01)

CPC (source: EP)  
**F27B 3/24** (2013.01); **F27D 1/12** (2013.01); **F27D 9/00** (2013.01); **F27D 2009/0024** (2013.01)

Citation (search report)  
• [XP] DE 3231224 A1 19840405 - SIDEPAL SA [LU]  
• [XD] DE 3202574 C1 19830224 - SIDEPAL SA  
• [Y] FR 2453376 A1 19801031 - BENTELER WERKE AG [DE]  
• [A] FR 2468863 A1 19810508 - DEMAG AG MANNESMANN [DE]  
• [A] FR 2418913 A1 19790928 - OSCHATZ GMBH [DE]  
• [AD] US 2179638 A 19391114 - HEINRICH KOPPERS  
• [AD] LU 78707 A1 19780621  
• [AD] EP 0025604 A1 19810325 - WESTERHOFF HEINZ  
• [AD] DE 2032829 A1 19720105

Cited by  
EP0217113A3; FR2663868A1; US5332199A; DE4223109C1; EP0579146A1; JP2020524250A; EP0805325A1; US5923697A; CN112113428A; US11396470B2; US7544321B2; WO2004106831A1

Designated contracting state (EPC)  
AT BE CH DE FR GB LI LU NL SE

DOCDB simple family (publication)  
**EP 0140401 A1 19850508**; IT 1175125 B 19870701; IT 8383463 A0 19830919

DOCDB simple family (application)  
**EP 84201172 A 19840814**; IT 8346383 A 19830919