

Title (en)  
Closed hearth system with forced air flow

Title (de)  
Geschlossenes Herdsystem mit Zwangsluftstrom

Title (fr)  
Système à foyer fermé avec écoulement d'air forcé

Publication  
**EP 2489936 A3 20171129 (EN)**

Application  
**EP 12155697 A 20120216**

Priority  
NL 2006270 A 20110221

Abstract (en)  
[origin: EP2489936A2] The present invention, relates to a closed hearth system. The system comprises a hearth (1) having an at least substantially closed combustion chamber (2), into which a fuel supply channel (18) for fluid fuel opens, in a wall of which combustion chamber an inlet opening is provided, which inlet opening is connected to a combustion air supply channel (4), and an outlet opening, which outlet opening is connected to a flue gas channel (5). The system further comprises an air circulation device (12) to be driven by a driving unit, which effects a forced air circulation, which air circulation device is connected to the flue gas channel and which, in use, generates an underpressure in the flue gas channel relative to the pressure in the combustion chamber. The invention further relates to a flue gas channel for use with a closed hearth system and to a method for adapting a closed hearth system.

IPC 8 full level  
**F23J 13/02** (2006.01); **F23L 17/00** (2006.01); **F23L 17/04** (2006.01); **F23N 1/04** (2006.01); **F23N 1/06** (2006.01); **F23N 3/08** (2006.01); **F23N 5/00** (2006.01); **F23N 5/18** (2006.01)

CPC (source: EP US)  
**F23J 13/025** (2013.01 - EP); **F23L 17/005** (2013.01 - EP); **F23L 17/04** (2013.01 - EP); **F23N 1/042** (2013.01 - EP); **F23N 1/062** (2013.01 - EP); **F23N 3/082** (2013.01 - EP); **F23N 5/003** (2013.01 - EP); **F23N 5/184** (2013.01 - EP); **F24C 3/004** (2013.01 - EP); **F24C 3/122** (2013.01 - EP); **F24C 5/00** (2013.01 - EP US); **F24C 5/16** (2013.01 - EP); **F24C 15/002** (2013.01 - EP); **F23N 2005/181** (2013.01 - EP); **F23N 2225/06** (2020.01 - EP); **F23N 2233/04** (2020.01 - EP); **F23N 2233/08** (2020.01 - EP); **F23N 2235/04** (2020.01 - EP); **F23N 2235/10** (2020.01 - EP); **F23N 2237/20** (2020.01 - EP)

Citation (search report)  
• [X] EP 1333227 A2 20030806 - BOSCH GMBH ROBERT [DE]  
• [X] US 5012793 A 19910507 - GUZOREK STEVEN E [US]  
• [X] CN 2921633 Y 20070711 - YANG XUEKAI [CN]  
• [X] US 5460162 A 19951024 - BINZER LOTHAR [CA]  
• [X] FR 2461198 A1 19810130 - LEBLANC SA E L M [FR]  
• [X] EP 0491444 A1 19920624 - BURGERHOUT BV [NL]

Cited by  
BE1023164B1; US2019212011A1; CN110056878A; BE1028447B1; EP3933265A3

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2489936 A2 20120822; EP 2489936 A3 20171129; NL 2006270 C2 20120822**

DOCDB simple family (application)  
**EP 12155697 A 20120216; NL 2006270 A 20110221**