

Title (en)  
Heat exchanger for a gas boiler.

Title (de)  
Wärmetauscher für Gaskessel.

Title (fr)  
Echangeur de chaleur pour chaudière à gaz.

Publication  
**EP 0570201 A1 19931118**

Application  
**EP 93303652 A 19930512**

Priority  
KR 920008010 A 19920512

Abstract (en)  
A heat exchanger for a gas boiler, having a simple structure and increased heat-exchanging efficiency, has a heating tube 13 wound into a spiral and having a plurality of heat-exchanging fins 13a formed thereon by rolling. At least one hot water tube 14 may be installed inside the heating tube, to perform both space heating and water heating in a compact structure. The outer peripheral surface of the hot water tube may be carved in a spiral form so that space heating water has a turbulent flow. <IMAGE>

IPC 1-7  
**F24H 1/43; F24H 1/52**

IPC 8 full level  
**F28D 7/02** (2006.01); **F24H 1/43** (2006.01); **F24H 1/52** (2006.01); **F28D 7/14** (2006.01); **F28D 19/00** (2006.01); **F28F 9/00** (2006.01);  
**F28F 13/12** (2006.01)

CPC (source: EP KR)  
**F24H 1/34** (2013.01 - KR); **F24H 1/43** (2013.01 - EP); **F24H 1/52** (2013.01 - EP); **F24H 1/526** (2013.01 - EP)

Citation (search report)  
• [X] EP 0385700 A1 19900905 - NUNNERLEY MICHAEL JOHN [GB]  
• [X] DE 2253493 A1 19730510 - STEAM ENGINES SYSTEMS CORP  
• [Y] PATENT ABSTRACTS OF JAPAN vol. 12, no. 315 (M-735)26 August 1988 & JP-A-63 087 597 ( SAKUSHIYON GAS KIKAN SEISAKUSHO:KK ) 18 April 1988  
• [Y] PATENT ABSTRACTS OF JAPAN vol. 9, no. 307 (M-435)4 December 1985 & JP-A-60 144 595 ( MITSUBISHI JUKOGYO KK ) 30 July 1985

Cited by  
US6152086A; EP2467651A4; NL1004410C2; GB2551600A; GB2551600B; GB2447974A; EP1348914A1; WO2017220999A1; WO9820287A1;  
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DE FR NL

DOCDB simple family (publication)  
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DOCDB simple family (application)  
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