

Title (en)  
A BOILER ELEMENT

Publication  
**EP 0287142 B1 19910703 (EN)**

Application  
**EP 88200501 A 19880318**

Priority  
NL 8700641 A 19870318

Abstract (en)  
[origin: EP0287142A2] A counter-current heat exchange element, in particular for a central heating boiler, comprising a substantially flat box-shaped body (1) containing a water passage (5), the flat side walls (1a, 1b) of said body (1) being provided with protrusions (6) extending into flue passages (9) on both sides of said body (1) and being arranged according to a pattern of laterally offset rows with the lateral spacing of said protrusions (6) gradually decreasing from the high temperature area towards the low temperature area in each flue passage (9), the water passage (5) extending along a serpentine trajectory between a cool water inlet (2) in the low flue gas temperature area and a heated water outlet (3) in the high flue gas temperature area, the water passage (5) narrowing from the inlet (2) towards the outlet (3) in such a manner that the water flow velocity at the outlet (3) is higher than at the inlet (2).

IPC 1-7  
**F24H 1/38**; **F28F 1/12**; **F28F 13/08**

IPC 8 full level  
**F24H 1/38** (2006.01); **F28F 1/12** (2006.01); **F28F 13/08** (2006.01)

CPC (source: EP)  
**F24H 1/38** (2013.01)

Cited by  
EP1669689A3; AU618840B2; EP0608030A1; DE10306699A1; DE102007060508A1; EP1450114A1; WO2019008005A1; EP2065656A2; DE102007057062A1

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