

Title (en)  
Heating device with turbo stage

Title (de)  
Heizgerät mit Turbostufe

Title (fr)  
Dispositif de chauffage avec étage turbo

Publication  
**EP 0949455 B1 20020227 (DE)**

Application  
**EP 99106137 A 19990406**

Priority  
DE 19815636 A 19980407

Abstract (en)  
[origin: EP0949455A1] The heating unit has a bypass valve (7) with a solenoid operating unit (8), which is coupled with a fan (9), is arranged in a bypass to the fuel supply line (5), upstream from burner stages (1,2). Thus when increased heating power is required, an increased fuel supply to the burner stages results by the opening of the bypass valve by the solenoid. The bypass valve is only operable, if the fan is in operation. The throttle element is arranged in the fuel supply line, before its branching to the burner stages, outside from the bypass.

IPC 1-7  
**F23N 1/00; F24H 9/20**

IPC 8 full level  
**F23N 1/00** (2006.01); **F24H 9/20** (2006.01)

CPC (source: EP)  
**F23N 1/005** (2013.01); **F23N 2227/22** (2020.01); **F23N 2233/10** (2020.01); **F23N 2235/14** (2020.01); **F23N 2235/16** (2020.01);  
**F23N 2235/18** (2020.01); **F23N 2237/02** (2020.01); **F23N 2237/10** (2020.01); **F23N 2237/20** (2020.01); **F23N 2241/02** (2020.01)

Cited by  
US12043081B2; US11772452B2; US7513247B2; US6796326B2; WO2004063629A1; WO0179951A1; USD905217S; USD907183S;  
USD944374S

Designated contracting state (EPC)  
DE FR GB IT NL SE

DOCDB simple family (publication)  
**EP 0949455 A1 19991013; EP 0949455 B1 20020227**; DE 19815636 A1 19991014; DE 19815636 C2 20000706; DE 59900890 D1 20020404

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