

Title (en)  
Water heater

Title (de)  
Wassererhitzer

Title (fr)  
Chauffe-eau

Publication  
**EP 1041342 A1 20001004 (EN)**

Application  
**EP 00106271 A 20000322**

Priority  

- US 12661199 P 19990327
- US 41010599 A 19990930

Abstract (en)  
A water heater (10) having a combustion air inlet and a flue gas outlet (14). A manifold assembly (16) is provided which includes a box section (30), a flue gas port (32), a combustion air port (34) and a combustion air inlet collar (36). The combustion air inlet collar (36) communicates with the combustion air port (34) through the interior of the box section (30). A combination combustion air inlet and flue gas outlet assembly (14) is provided and includes a combustion air inlet tube (18) and a flue gas outlet tube (20) mounted concentrically inside the combustion air tube (18). The combustion air tube (18) is connected at one end to the box section (30) of the manifold and is connected at the other end with the atmosphere. The flue tube (20) is connected at one end to the flue gas inlet port (32) on the manifold and communicates with the atmosphere at the other end. An air blower (40) is mounted on the water heater (10). A combustion air tube (42) is connected at one end to the combustion air port (34) of the manifold and is connected at its other end to an air assembly box (43) mounted on the top of the water heater (10). The air blower (40) is operable to draw fresh combustion air through the combustion air tube (42) and then into the combustion chamber (19) of the water heater (10). A flue gas tube (38) is connected at one end to the flue gas port (32) of the manifold and is connected at the other end to the blower (40), which is operable to exhaust the flue gases from the combination combustion air inlet and flue gas outlet assembly (14). <IMAGE>

IPC 1-7  
**F23L 17/04**

IPC 8 full level  
**F23L 17/04** (2006.01); **F23L 17/16** (2006.01); **F24H 9/02** (2006.01)

CPC (source: EP US)  
**F23L 17/04** (2013.01 - EP US); **F23J 2213/203** (2013.01 - EP US)

Citation (applicant)  
US 5020512 A 19910604 - VAGO OTTO Z [US], et al

Citation (search report)  

- [A] US 4262608 A 19810421 - JACKSON BERT W
- [A] NL 9100209 A 19920901 - MUELINK & GROL BV
- [A] US 4867106 A 19890919 - STAATS CHARLES W [US]
- [DA] US 5020512 A 19910604 - VAGO OTTO Z [US], et al

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