

Title (en)  
ELECTRIC STEAM GENERATOR

Publication  
**EP 0143719 B1 19880518 (FR)**

Application  
**EP 84402423 A 19841128**

Priority  
FR 8319025 A 19831129

Abstract (en)  
[origin: US4605838A] An electric vapor boiler has a closed vessel (1) containing water, a steam or vapor outlet conduit (4), a conduit (6) supplying liquid and/or returning condensed vapor, and a electric resistance heating device (7) for each high or medium boiler voltage phase immersed in the water. Each heating device (7) includes a bare metallic resistance wire (8) immersed in the water and mounted in such a manner as to vibrate between a pair of vertical open-ended cylinders (13, 14) forming insulating screens. Each wire (8) is directly connected between a phase terminal (11) and ground, that is, the vessel (1) and has a plurality of parallel vertically spaced spires (18) offset symetrically with respect to each other on each side of a generatrix (16) of an oblique surface in the enclosure between the cylinders (13, 14) and extending obliquely to the vertical direction in the vessel (1). The outer cylinder (13) extends above the surface of the water. Alternatively, each wire can be formed as a plurality of parallel strands (38) and be positioned in an open-ended vertically disposed tube (33) having an oblong cross sectional shape.

IPC 1-7  
**F22B 1/28**

IPC 8 full level  
**F22B 1/28** (2006.01)

CPC (source: EP US)  
**F22B 1/284** (2013.01 - EP US)

Cited by  
FR2560729A1; EP0263049A3; CN104411024A

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**EP 0143719 A1 19850605; EP 0143719 B1 19880518**; AT E34444 T1 19880615; CA 1236152 A 19880503; DE 3471358 D1 19880623; FR 2555709 A1 19850531; FR 2555709 B1 19860418; JP H0245082 B2 19901008; JP S60144501 A 19850730; NO 157272 B 19871109; NO 157272 C 19880217; NO 844736 L 19850530; US 4605838 A 19860812

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