

Title (en)  
REFRIGERATOR

Title (de)  
KÜHLVORRICHTUNG

Title (fr)  
REFRIGERATEUR

Publication  
**EP 1369650 A4 20060426 (EN)**

Application  
**EP 02705107 A 20020313**

Priority  
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Abstract (en)  
[origin: EP1369650A1] In a refrigerator employing a combustible refrigerant, a plurality of grass-tube heaters for defrosting is disposed close to an evaporator of a combustible-refrigerant-sealed refrigeration cycle. By controlling the application of an electric current or voltage to the glass-tube heater, the surface temperature of the heater can be kept below the ignition temperature of the combustible refrigerant. Furthermore, following structures are effective in decreasing the surface temperature of the heater - i) making contact the glass-tube heater to fins of the evaporator, ii) forming the glass-tube heater into a tube-in-tube structure and disposing a sealing member at an end of the glass tube. Such structured refrigerator prevents the combustible refrigerant from catching fire even if defrosting is performed in an environment where leakage of the refrigerant occurs, and improves poor refrigeration due to residual frost. <IMAGE>

IPC 1-7  
**F25D 21/08**

IPC 8 full level  
**F25B 1/00** (2006.01); **F25D 21/08** (2006.01); **H05B 3/44** (2006.01); **H05B 3/50** (2006.01); **F25D 21/14** (2006.01)

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**F25D 21/08** (2013.01 - EP KR); **H05B 3/44** (2013.01 - EP); **H05B 3/50** (2013.01 - EP); **F25B 2400/12** (2013.01 - EP); **F25D 21/14** (2013.01 - EP); **F25D 2400/04** (2013.01 - EP); **F25D 2400/24** (2013.01 - EP)

Citation (search report)  
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• [Y] US 4091637 A 19780530 - VOGEL KENNETH E, et al  
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• [Y] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 07 29 September 2000 (2000-09-29)  
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