

Title (en)
COMPOSITE HEATING ELEMENT WITH VERY LOW VOLTAGE ELECTRIFICATION

Title (de)
VERBUNDHEIZELEMENT MIT SEHR NIEDRIGER ELEKTRIFIZIERUNGSSPANNUNG

Title (fr)
ÉLÉMENT CHAUFFANT COMPOSITE À TRÈS BASSE TENSION ÉLECTRIQUE

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Application
EP 23216586 A 20231214

Priority
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Abstract (en)
A thermally conductive and heating composite element (1; 50) comprising a laminar support layer (2; 51) provided with a first face (2a) adapted to remain facing towards the outside in application conditions, and with a second face (2b), opposite to the first face (2a), adapted to be coupled to a reference surface in application conditions, and a thermo-conductive and heating circuit (3; 52) of the electrical type, applied to the first face (2a) of the laminar support layer (2; 51), electrically connected to a very low voltage electrical power supply source comprised in the range of values from 3 Volts to 50 Volts, adapted to electrify the thermo-conductive circuit (3; 52) to produce heat. Particularly, in the thermally conductive and heating composite element (1; 50) of the invention, the thermo-conductive and heating circuit (3, 52) comprises at least one continuous resistive track (4) distributed on the first face (2a) of the laminar support layer (2; 51) and provided with a first end (4a), adapted to be coupled to a first electrical pole (P) of the electrical power supply source, and with a second end (4b) adapted to be coupled to a second electrical pole (N), having a polarity opposite to the polarity of the first electrical pole (P), of the electrical power supply source itself.

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Citation (applicant)
• US 2005082280 A1 20050421 - FERGUSON PATRICK [GB]
• US 2008083743 A1 20080410 - WHEELER BRIAN [US], et al
• KR 20160131389 A 20161116 - KIM SANG HYON [KR]

Citation (search report)
• [X] US 2005082280 A1 20050421 - FERGUSON PATRICK [GB]
• [XY] US 2008083743 A1 20080410 - WHEELER BRIAN [US], et al
• [Y] KR 20070000149 U 20070201
• [Y] US 2010206863 A1 20100819 - RITTER WOLFGANG [DE]
• [XYI] KR 20160131389 A 20161116 - KIM SANG HYON [KR]
• [Y] EP 0838127 B1 20070307 - HPS DIVISION MKS INSTR INC [US], et al

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