

Title (en)

DEVICE FOR PROTECTING AN ELECTRICAL APPARATUS AGAINST DISTURBANCES

Publication

EP 0090774 B1 19890301 (DE)

Application

EP 83810119 A 19830323

Priority

CH 188782 A 19820326

Abstract (en)

[origin: EP0090774A2] 1. Anti-interference device for an electrical appliance for attenuating high-frequency interference present on the mains or transmitted to the mains by the appliance, in which a plug-in connecting lead is provided to electrically connect the appliance to the mains, which lead surrounds a cable (1) which comprises a plurality of conductors (2, 3, 4), is connected at one end to a mains plug (6, 16) and at the other end to appliance connecting means (7, 17), inductive and/or capacitive anti-interference components (8, 9 and 12, 13, respectively), which are connected to the conductors (2, 3, 4) of the cable (1), being arranged in the mains plug (6, 16), characterized in that inductors (8, 9) are fitted in the mains plug (6, 16) to attenuate high-frequency interference in a low frequency range, up to approximately 1 MHz, that capacitors (12, 13), which are connected to the inductors (8, 9), are arranged in the mains plug (6, 16) and further capacitors (14, 15) and/or inductors are arranged in the appliance connecting means (7, 17) for attenuation in a medium frequency range, from approximately 1 MHz to approximately 30 MHz, and that the insulated conductors (2, 3, 4) of the cable (1) are surrounded by a metallic shield (5), which is connected to an earth connection (E) of the mains plug (6, 16) and the capacitance of which, formed with the conductors (2, 3, 4) of the cable (1), produces a connected filter circuit for attenuation in a high frequency range, from approximately 30 MHz to approximately 1 GHz, and for co-operation with the capacitors (12, 13 and 14, 15, respectively) of the mains plug (6, 16) and the appliance connecting means (7, 17), as well as the inductors (8, 9) at least of the mains plug (6, 16).

IPC 1-7

H01R 13/719

IPC 8 full level

H01R 13/719 (2011.01)

CPC (source: EP)

H01R 13/719 (2013.01)

Cited by

CN111613938A; EP0918373A3; EP0910136A3; BE1005762A3; EP0181286A1; EP0502467A1; GB2271472A; US2010203762A1; US8975790B2; ITUA20164562A1; GB2288493A; GB2288493B; DE3440573A1; EP0184009A3; US6984148B1; WO0197337A1; EP0988872B1; WO2024165263A1

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