

Title (en)

ASSEMBLY COMPRISING A TOROIDAL CORE INDUCTOR AND A HEAT SINK

Title (de)

BAUGRUPPE UMFASSEND EINE RINGKERNDROSSEL UND EINEN KÜHLKÖRPER

Title (fr)

ENSEMble COMPRENANT UN INDUCTEUR À NOYAU TOROÏDAL ET UN DISSIPATEUR THERMIQUE

Publication

**EP 4055619 A1 20220914 (DE)**

Application

**EP 20800595 A 20201028**

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Abstract (en)

[origin: WO2021089377A1] The invention proposes an assembly comprising a toroid core inductor (5) and a heat sink (20), wherein the toroidal core inductor (5) comprises a toroidal core (10) and an electrical conductor (6) which surrounds the toroidal core (10), wherein the toroidal core (10) has an axial direction (A) and a central ring opening (18), and wherein a first annular surface (11) and a second annular surface (12), which is averted from the first annular surface (11), are formed on the toroidal core (10), wherein the assembly (1) further comprises a heat sink (20) composed of thermally conductive material with a top side (21), wherein the toroidal core inductor (5) is arranged on the top side (21) of the heat sink (20) and the second surface of the toroidal core (12) faces the top side (21) of the heat sink (20), wherein cooling elements (22) which project from the top side (21) of the heat sink (20) are formed on the heat sink (20), wherein recesses (14) are formed in the toroidal core (10), wherein each of the cooling elements (22) is arranged in a respective one of the recesses (14) of the toroidal core (10) and in such a way that it projects into the toroidal core (10).

IPC 8 full level

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Citation (search report)

See references of WO 2021089377A1

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