

Title (en)
MATRIX TRANSFORMER

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Title (fr)
TRANSFORMATEUR MATRICIEL

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Abstract (en)
[origin: WO2022263221A1] The invention describes a matrix transformer, comprising a body which is composed of soft-magnetic material and forms a closed magnetic circuit through openings in at least one printed circuit board, wherein the body has a plurality of magnetic limbs which are surrounded by current-carrying turns, wherein the body has two parallel magnetic plates on either side of the printed circuit board, the magnetic limbs connecting said magnetic plates to one another, wherein the turns, owing to a suitably selected winding direction, each form at least one magnetic field-free zone in the magnetic plates, and wherein a recess is made within the magnetic field-free zone in at least one magnetic plate, a cooling pin which is connected to a heat sink being guided through said recess as far as a surface of the printed circuit board.

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