

Title (en)
UNDULATOR FOR PRODUCING SYNCHROTRON RADIATION

Title (de)
UNDULATOR ZUR ERZEUGUNG VON SYNCHROTRONSTRAHLUNG

Title (fr)
ONDULEUR DESTINÉ À PRODUIRE UN RAYONNEMENT SYNCHROTRON

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Abstract (en)
[origin: WO2010046068A1] The invention relates to an undulator (10) for producing synchrotron radiation from a particle stream (1) introduced into the undulator, said stream particularly comprising electrons. The undulator (10) comprises two partial undulators (11, 12), each having a winding body for receiving a coil package and a plurality of magnetic poles of the undulator. The winding body alternately comprises a plurality of first layers (21, 21', 21'',), each having a non-magnetic material over which the coil package is guided, and second layers (22, 22', 22'',), each having a soft magnetic material, serving as poles of the undulator, said layers being attached parallel to one another. The undulator according to the invention furthermore comprises lateral correction coils (31, 31',) that are attached to selected second layers and enable effective local field error correction.

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