

Title (en)

MAGNETIC FLUX SHAPING IN ION ACCELERATORS WITH CLOSED ELECTRON DRIFT

Title (de)

MAGNETFELDGESTALTUNG IN IONEBESCHLEUNIGERN MIT GESCHLOSSENER ELEKTRONENLAUFBAHN

Title (fr)

MISE EN FORME DU FLUX MAGNETIQUE DANS DES ACCELERATEURS D'IONS A COURANT D'ELECTRONS FERME

Publication

**EP 1082540 A2 20010314 (EN)**

Application

**EP 99931754 A 19990603**

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- US 19174998 A 19981113

Abstract (en)

[origin: WO9963221A2] A specially designed magnetic shunt is provided encircling the anode region and/or annular gas distribution area of an ion accelerator with closed electron drift. The magnetic shunt is constructed to concentrate the magnetic field at the ion exit end, such that the location of maximum magnetic field strength is located downstream from the inner and outer magnetic poles of the accelerator. The specially designed shunt also results in desired curvatures of magnetic field lines upstream of the line of maximum magnetic field strength, to achieve a focusing effect for increasing the life and efficiency of accelerator.

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