

Title (en)

HF CAVITY AND ACCELERATOR HAVING SUCH AN HF CAVITY

Title (de)

HF-KAVITÄT SOWIE BESCHLEUNIGER MIT EINER DERARTIGEN HF-KAVITÄT

Title (fr)

CAVITÉ HF ET ACCÉLÉRATEUR POURVU D'UNE TELLE CAVITÉ

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2011061026A1] The invention relates to an HF cavity, wherein the HF cavity has a chamber, a conductive wall (15) surrounding the chamber, which has an inner face (19) and an outer face (17), and a switch assembly having a plurality of solid body switches (29) which are arranged along a circumference of the wall (15) around the chamber, wherein the solid body switches (29) are connected to the conductive wall (15) such that upon activation of the switching assembly HF currents are induced in the conductive wall (15), causing HF power to be coupled in the chamber of the HF cavity (11), wherein there is a shielding device (33, 37, 39, 41, 43) along a circumference of the HF cavity (11) on the outer face (17) of the conductive wall (15) which increases the impedance of a dispersion path of HF currents along the outer face (17) of the wall (15) such that the HF currents coupled in the wall (15) are suppressed on the outer face (17) of the wall (15). The invention further relates to an accelerator having said HF cavity.

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