

Title (en)  
COMPACT ISOCHRONIC CYCLOTRON

Title (de)  
KOMPAKTES ISOCHRONES ZYKLOTRON

Title (fr)  
CYCLOTRON ISOCHRONE COMPACT

Publication  
**EP 0613607 B1 19960320 (FR)**

Application  
**EP 92923442 A 19921120**

Priority  
• BE 9101080 A 19911122  
• BE 9200050 W 19921120

Abstract (en)  
[origin: WO9310651A1] A superconducting or non-superconducting compact isochronic cyclotron (1) in which the particle beam is sectorally focused. The cyclotron comprises a solenoid forming a magnetic circuit which includes at least 3 pairs of sectors (3 and 3') known as "ridges" where the air gap is reduced, and separated by sector-shaped spaces (4) known as "valleys" where the air gap is larger. Said magnetic circuit is energized by at least one pair of circular main coils (6) surrounding the solenoid poles. Said cyclotron is characterized in that the air gap (8) between two ridges (3 and 3') has a substantially elliptical curved profile which completely closes off the radial end of the ridges (RC) at the centre plane.

IPC 1-7  
**H05H 13/00**

IPC 8 full level  
**H05H 13/00** (2006.01)

CPC (source: EP US)  
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Cited by  
CN103493603A

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BE CH DE DK FR GB IT LI LU NL SE

DOCDB simple family (publication)  
**WO 9310651 A1 19930527**; BE 1005530 A4 19930928; CA 2122583 A1 19930523; CA 2122583 C 20011211; DE 69209312 D1 19960425; DE 69209312 T2 19960822; DK 0613607 T3 19960805; EP 0613607 A1 19940907; EP 0613607 B1 19960320; JP 3100634 B2 20001016; JP H07501171 A 19950202; US 5521469 A 19960528

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