

Title (en)  
X-ray tube and barrier means therefor

Title (de)  
Röntgenröhre und Barrierevorrichtung dafür

Title (fr)  
Tube à rayons X et élément barrière associé

Publication  
**EP 0768699 B1 20020619 (EN)**

Application  
**EP 96307066 A 19960927**

Priority  
GB 9519715 A 19950927

Abstract (en)  
[origin: EP0768699A1] An X-ray tube (7) is provided which is capable of generating high intensity X-rays without loss of reliability. The tube (7) includes a barrier means disposed between the focal spot (24) of the incident electron beam and the tube window (31) which prevents scattered electrons from reaching the window (31), whereas X-rays (9) are permitted to pass through at least a portion of the barrier means to reach the window (31). The X-ray permeable portion (20) of the barrier means typically consists of a diamond sheet. The X-ray tube has a small incident angle alpha (preferably between 7 DEG and 13 DEG ), a short distance between the focal spot (24) and the window (31), and a take-off angle beta preferably in the range 0 DEG to 20 DEG . <IMAGE>

IPC 1-7  
**H01J 35/16**

IPC 8 full level  
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CPC (source: EP)  
**H01J 35/16** (2013.01); **H01J 2235/168** (2013.01)

Cited by  
EP1540664A4; DE19900467A1; DE102004030832B4; US7280639B2

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