

Title (en)

X-RAY TUBE HAVING COLLIMATOR, COLLIMATOR APPARATUS FOR CLOSED X-RAY TUBE AND USE OF SUCH A COLLIMATOR APPARATUS

Title (de)

RÖNTGENRÖHRE MIT KOLLIMATOR, KOLLIMATORVORRICHTUNG FÜR GESCHLOSSENE RÖNTGENRÖHRE UND VERWENDUNG EINER SOLCHEN KOLLIMATORVORRICHTUNG

Title (fr)

TUBES À RAYONS X À COLLIMATEUR, DISPOSITIF COLLIMATEUR POUR TUBES À RAYONS X FERMÉS ET UTILISATION D'UN TEL DISPOSITIF COLLIMATEUR

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Application

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Abstract (en)

[origin: WO2019219909A1] The invention relates to an X-ray tube (1) having a housing (2), a target (3) and an outlet window (4) for X-ray radiation (5) generated on the target (3), wherein: the outlet window (4) is fixed in an opening (14) in the housing (2) in an air-tight manner; the outlet window (4) is opposite the target (3) and is arranged inside the housing (2); a collimator disk (19) made of a highly X-ray-radiation-absorbent material and having a collimator opening (20) is arranged on the X-ray tube (1); and the collimator disk (19) is opposite the outlet window (4) on the side thereof facing away from the target and is located below the surface of the housing (2). The invention additionally relates to a collimator apparatus (18) for an X-ray tube (1), having a base frame (25), on which a fastening apparatus (24) for fastening the collimator apparatus (18) to a tube flange (9) of an X-ray tube (1) is arranged, and having a support wall (23), which is connected to the base frame (25) and is arranged on the same side of the base frame (25) as the fastening apparatus (24), and having a collimator disk (19) which is made of a highly X-ray-radiation-absorbent material, has a collimator opening (20) and is arranged on the end of the support wall (23) remote from the base frame (25). Finally, the problem is also solved by the use of a collimator apparatus (1) according to the invention on an X-ray tube (1), particularly on an X-ray tube (1) according to the invention, in order to reduce the penumbra on a detector (6) during imaging of an object (8) by means of the X-ray radiation (5) emitted by the X-ray tube (1).

IPC 8 full level

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Citation (search report)

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