

ABSTRACT
AXIAL ELECTRON GUN

The invention relates to the field of fabrication of new materials and coatings
5 and may be used in plants designed for electron-beam heating, melting and evaporating
of materials in vacuum or reactive gas atmosphere. The disclosed axial electron gun that
comprises, in particular, the primary and secondary cathodes and features the figure-
shaped holder used for maintaining a stable position of the secondary cathode relative to
the electron-beam axis of the axial gun and the pulsing voltage that is applied between
10 the cathodes for electron bombardment of the secondary cathode. The invention ensures
an improved stability of process parameters and operation of the electron gun.

Fig. 7