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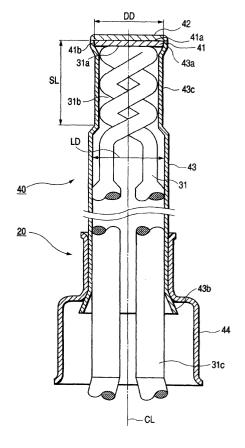
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(54) Cathode ray tube with indirectly heated cathode

(57)A cathode ray tube has a vacuum envelope formed of a panel portion (11), a neck portion (12) and a funnel portion (13) for connecting the panel portion and the neck portion, a phosphor screen (14) formed on an inner surface of the panel portion, and an electron gun (19) housed in the neck portion and including a cathode (40) and a heater (31a). The cathode includes a disk-shaped cathode base metal (41) having an oxide coating (42) thereon and a cylindrical cathode sleeve (43) housing the heater. The cylindrical cathode sleeve includes a small-diameter portion (43c) having the diskshaped cathode base metal fitted within an end thereof and housing a top portion of the heater and a large-diameter portion housing leg portions (31) of the heater, and an axial length SL (mm) of the small-diameter portion and an outside diameter DD (mm) of the diskshaped cathode base metal satisfies the following inequation:

 $0.5 \le SL/DD \le 4.0.$

FIG. 4





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