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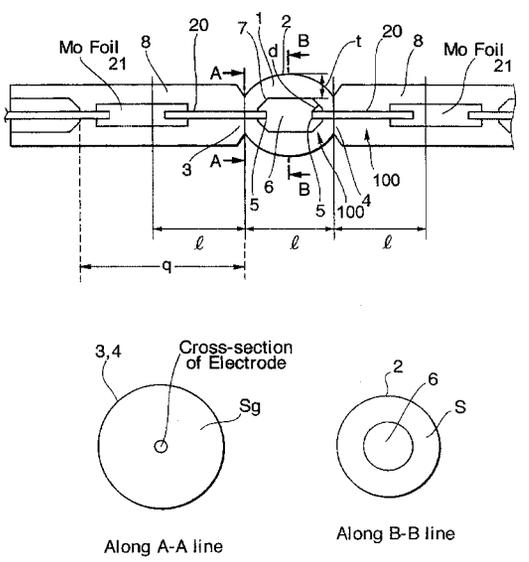
(54) Double-end type metal halide bulb with low power consumption

(57) The double end type ScI_3-NaI metal halide lamp with rated power consumption smaller than 35 W, more specifically 20-30 W, of the present invention comprises a pair of electrodes (20) whose diameter ∅ n is equal to or smaller than 0.25mm (∅n ≤ 0.25 mm), and the diameter ∅ P of the electrode tip portion (5) is equal to or larger than the diameter ∅ S of the remaining electrode portion (∅P ≥ ∅S). The electrode tip portion (5) is spherical or cylindrical, and the cross section area of the electrode (20) increases as a cross section moves toward the tip portion (5) for mitigating thermal emission from the electrode tip portion (5) and preventing low light emission efficiency due to small input power. The arc chamber (6) is substantially a sphere, elliptic, or any similar shape to them, and comprises the pair of electrodes (20), mercury, rare gas, and at least one kind of metal halide sealed therein. Since rare gas, more specifically Xenon gas, is sealed within an arc chamber (6) in high pressure, when applied excessive current, instant lumen output is achieved.

FIG. 1



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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
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CATEGORY OF CITED DOCUMENTS

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