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(54) **Mercury-free high-pressure discharge lamp and luminaire using the same**

(57) A mercury-free high-pressure discharge lamp includes a light-transmissive airtight envelope enclosing therein a discharge space, a pair of electrodes sealed inside the light-transmissive airtight envelope and facing the discharge space, and an ionization medium substantially excluded mercury therefrom, which is filled in the

light-transmissive airtight envelope, wherein the ionization medium contains, a principal metal halide including thulium (Tm) as primary constituent thereof and capable of emitting light mainly at a visible range, an accessory metal halide including zinc (Zn) as primary constituent thereof and capable of fixing lamp voltage, and rare gas.

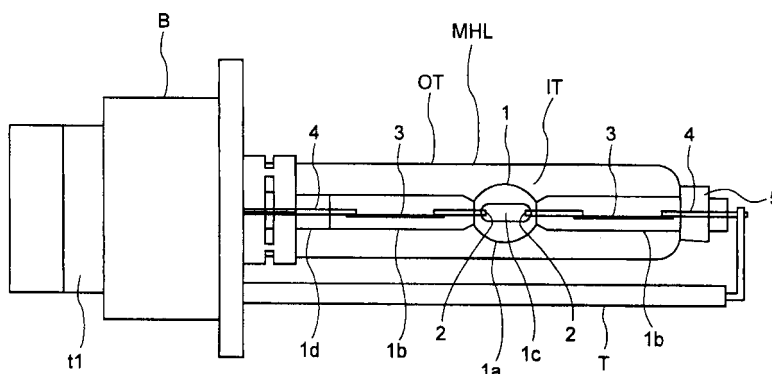


FIG. 1



EUROPEAN SEARCH REPORT

Application Number
EP 06 01 9906

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 1 October 2008	Examiner But, Gabriela-Ileana
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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