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Liu et al.

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(54) **BILATERAL COOLING TYPE SEMICONDUCTOR LASER SYSTEM FOR MEDICAL BEAUTY USE**

(52) **U.S. Cl.**
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(58) **Field of Classification Search**
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See application file for complete search history.

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 49 days.

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(57) **ABSTRACT**

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Disclosed is a bilateral cooling type semiconductor laser system for medical beauty use, the contact window of which can make direct contact with the skin. The bilateral cooling type semiconductor laser system for medical beauty use comprises a semiconductor laser array, an optical waveguide located on the front end of the light emitting surface of the semiconductor laser array, a transparent contact window abutting against the light outlet end of the optical waveguide, a pair of cooling blocks and a first water throughflow block. The first water throughflow block is divided into a basal part and a U-shaped head located above the basal part, and the middle part and back part of the optical waveguide are embedded in the U-type header. A fixed block is provided above the corresponding optical waveguide to press and fix the optical waveguide. There is still a space between the optical waveguide and the side wall of the U-type header. The pair of cooling blocks extends to the forepart of the optical waveguide and encircles the side wall of the contact

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