CLAIMS

1. Method of limiting the deflection of a laser head during temperature changes,

wherein the temperature difference between the upper wall and the lower wall of the laser head is reduced by metal plate parts with high thermal conductivity and low specific weight attached by a thermally conductive joint to the side walls connecting the upper wall and the lower wall of the laser head,

wherein the upper wall is the warmest wall and the lower wall is the coldest wall during operation of the laser head, as the lower wall is connected via a low thermal resistance to a cooler for exchanging heat with the environment.

2. A laser head with limited deflection during temperature changes consisting of an upper wall carrying a HV bushing of main discharge electrodes and a lower wall, side walls with bushings, a front wall and a rear wall with elements of an optical resonator,

wherein metal plate parts with high thermal conductivity and low specific weight are attached by a thermally conductive joint to the side walls connecting the warmest / coldest upper wall and the coldest / warmest lower wall of the laser head,

wherein the coldest wall is the wall which is connected via a low thermal resistance to a cooler for exchanging heat with the environment.

3. A laser head with limited deflection during temperature changes according to claim 2, wherein the metal plate parts have a low specific weight.