

Method and device for local stabilization of a radiation spot on a remote target object

Abstract

- 5 A method for local stabilization of a radiation spot (S) on a remote target object (Z), wherein the radiation spot (S) is formed by a high energy laser beam (L) that is aimed at the target object (Z) by a high energy radiation emitter (1), and wherein the target object (Z) is illuminated by an illumination beam (B) that is aimed at the target object (Z) by an illumination device (2), distinguished in that
- 10 - radiation (B') reflected by the target object (Z) that is illuminated by the illumination beam (B) is received by an image acquisition device (3);
- the radiation (B') reflected by the target object (Z) to the image acquisition device (3) passes through the same optical path (P) as the high energy laser beam (L);
- 15 - the image of the illuminated target object (Z) or part of the illuminated target object acquired by the image acquisition device (3) is analyzed and compared to at least one image of the illuminated target object (Z) or part of the illuminated target object produced at a prior point in time or to an image stored in an object database;
- 20 - proceeding from this comparison a correction signal is determined with which an optical correction device (12) arranged in the optical path (P) passed through by both the high energy laser beam (L) and the reflected radiation (B') is actuated.
- 25 (Fig. 1)