DIRECTED ENERGY DEPOSITION TO FACILITATE HIGH SPEED APPLICATIONS

Abstract of the Disclosure

The present invention relates to methods, apparatuses, and systems for controlling the density of a fluid near a functional object in order to improve one or more relevant performance metrics. In certain embodiments, the present invention relates to forming a low density region near the object utilizing a directed energy deposition device to deposit energy along one or more paths in the fluid. In certain embodiments, the present invention relates to synchronizing energy deposition with one or more parameters impacting the functional performance of the object.

[Figure 37]