

Abstract

A device for atomizing a metallic, intermetallic or ceramic melt stream by means of a gas to form a spherical powder, comprising.

- 5 - a melt chamber (1),
- a powder chamber (2),
- an induction coil (3) in the melt chamber (1),
- a melt material, preferably melt rod (7) in the induction coil (3) and
- 10 - an atomizer nozzle (5) interconnecting the melt and powder chambers (1, 2) and being arranged in a nozzle plate (4), for the melt
- stream (8) melted off from the melt material by the induction coil
- (3), wherein the atomizer nozzle (5) has an exclusively convergent
- nozzle profile having nozzle flanks (13) which have a circular-arc-
- shaped cross-section, and therefore both the atomizing gas (V) and
- 15 the melt stream and the droplets generated therefrom reach a velocity which is at most equal to, preferably below the acoustic velocity of the atomizing gas (V).

- Fig. 1 -