

ANALYSIS SYSTEM AND METHOD FOR A METAL POWDER JET

Abstract

Analysis system (310) for a powder jet of an additive manufacturing machine, said powder jet (21) comprising powder and gas, said analysis system (310) comprising a separation device (312), said separation device (312) comprising: - a separator element (326, 327) comprising a circular side wall (328) defining a cylinder and at least one separation wall (330) suitable for separating the inner volume of said separator element (326, 327) into n equal portions that are symmetric with respect to the axis of symmetry of the cylinder, said separator element (326, 327) being suitable for receiving an initial powder jet (21) at the centre of said separator element (326, 327), on said at least one separation wall (330), in order to separate the initial powder jet (21) into n powder jet portions; and - means for detecting the quantity of powder in each powder jet portion.

Fig. 15