

PLASMA TORCH, PLASMA THERMAL SPRAYING DEVICE, AND CONTROL
METHOD FOR PLASMA TORCH

[Document name] Abstract

[summary]

The plasma torch according to the present invention rotates the generated plasma P along the central axis T and ejects it in the axial direction, and also causes the plasma P to melt the powder of the thermal spray material and discharge it to the outside from the front nozzle opening. The current vector and the magnetic flux vector are orthogonal. A vector of current flowing between the first discharge surface 39 of the cathode 36 and the second discharge surface 49 of the second electrode 41 in order to generate plasma P, and a vector of magnetic flux of a magnetic field synthesized by the first magnet 37, the second magnet 42, the third magnet M3, and the fourth magnet M4, are orthogonal.

[Figure 1]