

ABSTRACT OF THE DISCLOSURE

CENTRIFUGAL COMPRESSOR

The centrifugal compressor of the present invention is equipped with a plurality of vane groups (A, B) comprised of a plurality of vanes (16A, 16B) disposed in the peripheral direction of an impeller (12) so as to be concentric about the center of an axis of rotation (15) of the impeller, and the individual vanes (16A) belonging to vane group (A) nearest to the impeller are able to rotate. Since diffuser efficiency decreases if the intake flow volume of the impeller changes and the flow of gas is unable to easily continue from the vanes (16A) to vanes (16B), the vanes (16A) are rotated to change the inclination of the direction of a wing center line on their front edges so as to coincide with the direction of the flow of gas discharged from the impeller. As a result, diffuser efficiency is maintained at a high level even if the intake flow volume of the impeller is changed.

Figure 1