

ABSTRACT

PISTON RING AND COMPRESSOR USING THE SAME

To provide a piston ring solving both of ensuring sealing performance of the piston ring for a compressor and reducing wear of the piston ring by balancing contact pressure of a sliding portion and a compressor using the piston ring.

To solve the above problems, the piston ring is provided with a first abutment portion overlapping in a step shape in a height direction of the piston ring and a second abutment portion overlapping in a lip shape in a radial direction of the piston ring in an abutment portion thereof, an end of the first abutment portion includes a first abutment groove through which an inner circumference and an outer circumference of the piston ring are communicatively connected on the pressurizing side, an end of the second abutment portion includes a second abutment groove through which the inner circumference and the outer circumference of the piston ring are not communicatively connected on the non-pressurizing side with the overlapping lip shape, and a circumferential groove communicatively connected to the first abutment groove and communicatively not connected to the second abutment groove is provided on the outer circumference of the piston ring. Accordingly, wear of the sliding surface can be reduced without causing performance

degradation of the piston ring.

FIG. 13