

## **TITLE OF INVENTION**

Black quartz glass and method for producing same

## **ABSTRACT**

The present invention relates to a black quartz glass consisting of a composition comprising 63 to 65 mass% of  $\text{SiO}_2$ , 18 to 24 mass% of  $\text{TiO}_2$ , and 12 to 17 mass% of  $\text{Al}_2\text{O}_3$ , wherein the sum of  $\text{SiO}_2$ ,  $\text{TiO}_2$  and  $\text{Al}_2\text{O}_3$  is 100 mass%; and to a method for producing black quartz glass comprising: mixing 63 to 65 mass% of a  $\text{SiO}_2$  powder, 18 to 24 mass% of a  $\text{TiO}_2$  powder and 12 to 17 mass% of an  $\text{Al}_2\text{O}_3$  powder, filling the mixed powder into a mold and then melting at a maximum temperature of 1700 to 1900°C in an oxygen-free atmosphere, and cooling to room temperature to obtain the black quartz glass; and further to a product comprising a black quartz glass member made of the black quartz glass. The present invention allows to provide a black quartz glass which has an excellent light-shielding property, has no risk of causing contamination in a step of using it, has sufficient color uniformity when the size is enlarged, and is capable of producing a large ingot, and to provide a method for producing the black quartz glass with excellent productivity even in the large ingot, and to provide a black quartz glass product made of the black quartz glass.

[No Available Figure]