

ABSTRACT

QUARTZ GLASS HAVING EXCELLENT RESISTANCE AGAINST PLASMA CORROSION AND METHOD FOR PRODUCING THE SAME

As a jig material to use under plasma reaction for producing
5 semiconductors, the present invention provides a quartz glass having
resistance against plasma corrosion, particularly corrosion resistance
against fluorine-based plasma gases, and which is usable without
causing anomalies to silicon wafers; the present invention furthermore
provides a quartz glass jig, and a method for producing the same. A
10 quartz glass containing 0.1 to 20 wt% in total of two or more types of
metallic elements, said metallic elements comprising at least one type of
metallic element selected from Group 3B of the periodic table as a first
metallic element and at least one type of metallic element selected from
the group consisting of Mg, Ca, Sr, Ba, Sc, Y, Ti, Zr, Hf, lanthanoids, and
15 actinoids as a second metallic element, provided that the maximum
concentration of each of the second metallic elements is 1.0 wt% or less.

(FIG.1)