

[DOCUMENT] ABSTRACT

The object is to provide a mask blank that can be used to form a transfer mask with high precision, which has an assist pattern with a size as small as about 20nm.

The mask blank has a structure where a thin film for pattern formation, a first hard mask film, and a second hard mask film are stacked in this order on a main surface of a substrate, the thin film for pattern formation contains a transition metal, the first hard mask film contains oxygen and one or more elements selected from silicon and tantalum, the second hard mask film contains a transition metal, a content of transition metal of the second hard mask film is less than the content of transition metal of the thin film for pattern formation, a region where a first hard mask film is formed on the main surface is smaller than a region where the thin film for pattern formation is formed, and the second hard mask film and the thin film for pattern formation are in contact with each other at least in part.