# CLAIMS

1. A reflective mask blank comprising a multilayer reflective film and a phase shift film for shifting a phase of EUV light on a substrate in this order,

wherein the phase shift film has a thin film of a material comprising metals containing ruthenium (Ru) and at least one or more elements of chromium (Cr), nickel (Ni), ~~cobalt (Co),~~ aluminum (Al), silicon (Si), ~~titanium (Ti),~~ vanadium (V), germanium (Ge), ~~niobium (Nb), molybdenum (Mo),~~ tin (Sn), tellurium (Te), hafnium (Hf), and tungsten (W) ~~and rhenium (Re)~~.

2. The reflective mask blank according to claim 1, wherein the crystal structure of the phase shift film is amorphous.

3. The reflective mask blank according to claim 1 or 2, wherein the phase shift film is a thin film of a material comprising metals containing ruthenium (Ru) and at least one or more elements of chromium (Cr), and nickel (Ni) ~~and cobalt (Co)~~.

4. The reflective mask blank according to claim 3, wherein a composition ratio of the Ru and the Cr (Ru : Cr) is 15 : 1 to 1 : 20.

5. The reflective mask blank according to claim 3, wherein a composition ratio of the Ru and the Ni (Ru: Ni) is 20 : 1 to 1 : 4.

~~6. The reflective mask blank according to claim 3, wherein a composition ratio of the Ru and the Co (Ru : Co) is 20 : 1 to 1 : 5.~~

~~7~~6. The reflective mask blank according to any one of claims 1 to ~~6~~5, further comprising a protective film between the multilayer reflective film and the phase shift film, wherein the protective film is made of a material containing silicon (Si) and oxygen (O).

~~8~~7. A reflective mask comprising a phase shift pattern obtained by patterning the phase shift film in the reflective mask blank according to any one of claims 1 to ~~7~~6.

~~9~~8. A method of manufacturing a reflective mask in which a phase shift pattern is formed by patterning the phase shift film of the reflective mask blank according to any one of claims 1 to ~~7~~6, by a dry etching gas comprising a chlorine-based gas and an oxygen gas.

~~10~~9. A method of manufacturing a semiconductor device, the method comprising placing the reflective mask according to claim ~~8~~ 7 in an exposure apparatus comprising an exposure light source that emits EUV light, and transferring a transfer pattern to a resist film formed on a transferred substrate.