CLAIMS

1. A reflective mask blank comprising a multilayer reflective film and an absorber film in that order on a substrate, wherein,

the absorber film is made of a material comprising an amorphous alloy comprising at least one or more elements among cobalt (Co) and nickel (Ni), and

the content of at least one or more elements among cobalt (Co) and nickel (Ni) in the material of the absorber film is not less than 40 at%.

2. The reflective mask blank according to claim 1, wherein the amorphous alloy comprises at least one or more elements among tungsten (W), niobium (Nb), tantalum (Ta), titanium (Ti), zirconium (Zr), hafnium (Hf), yttrium (Y) and phosphorous (P) added to at least one or more elements among the cobalt (Co) and the nickel (Ni).

3. The reflective mask blank according to claim 1 or 2, wherein the amorphous alloy comprises tantalum (Ta) added to at least one or more elements among the cobalt (Co) and the nickel (Ni), and the content of the tantalum (Ta) is 10 at% to 50 at%.

4. The reflective mask blank according to any one of claims 1 to 3, wherein the reflective mask blank comprises a protective film between the multilayer reflective film and the absorber film.

5. The reflective mask blank according to any one of claims 1 to 4, wherein the reflective mask blank comprises an etching mask film on the absorber film, and the etching mask film is made of a material comprising chromium (Cr) or a material comprising silicon (Si).

6. The reflective mask blank according to claim 4 or 5, wherein the reflective mask blank comprises an etching stopper film between the protective film and the absorber film, and the etching stopper film is made of a material comprising chromium (Cr) or a material comprising silicon (Si).

7. A reflective mask comprising an absorber pattern obtained by patterning the absorber film in the reflective mask blank according to any one of claims 1 to 6.

8. A method of manufacturing a reflective mask in which an absorber pattern is formed by patterning the absorber film of the reflective mask blank according to any

one of claims 1 to 6 by dry etching using a chlorine-based gas.

9. A method of manufacturing a reflective mask in which an absorber pattern is formed by patterning the absorber film of the reflective mask blank according to any one of claims 1 to 6 by dry etching using a first chlorine-based gas and a second chlorine-based gas differing from the first chlorine-based gas.

10. A method of manufacturing a semiconductor device, the method comprising placing the reflective mask according to claim 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.