CLAIMS

1. An optical film comprising:

a translucent base (A); and

a resin layer (B), wherein

the resin layer (B) is formed on the translucent base (A),

the resin layer (B) comprises a surface modifier and a resin being a copolymer of an oligomer having a functional group and a monomer,

elements constituting the surface modifier in the resin layer (B) include silicon,

an amount of the surface modifier to be added is in a range from 0.01 to 5 parts by weight relative to 100 parts by weight of the resin, and

the number of atoms in the resin layer (B) at a depth of 1 nm from a surface facing away from the translucent base (A) satisfies the following equation (1):

$$5.0 \leq [(n_{Si}/n_{total}) \times 100] \leq 9.0 \qquad (1)$$

where in the equation (1), n_{total} represents a sum of the number of atoms of carbon, nitrogen, oxygen, and silicon, and n_{Si} represents the number of silicon atoms.

2. The optical film according to claim 1, wherein

the resin layer (B) has a thickness from 1.0 to 5.0 μm.

3. The optical film according to claim 1 or 2, wherein

the surface modifier comprises a silicon compound having a dimethylsiloxane skeleton.

4. The optical film according to any one of claims 1 to 3, wherein

the resin layer (B) is a hard coat layer.

5. The optical film according to any one of claims 1 to 4, wherein

another layer (C) is attached to the surface of the resin layer (B) facing away from the translucent base (A) by a pressure-sensitive adhesive layer.

6. The optical film according to claim 5, wherein

the pressure-sensitive adhesive layer satisfies the condition of the following equation (2):

$(d_1 - d_2) / d_1 \geq 0.10$ (2)

where in the equation (2), d_1 represents a water contact angle (°) of the surface of the resin layer (B) in a case where the pressure-sensitive adhesive layer and the another layer (C) are not formed thereon, and d_2 represents a water contact angle (°) of a surface of the pressure-sensitive adhesive layer after the another layer (C) is peeled from the pressure-sensitive adhesive layer.

7. The optical film according to claim 5 or 6, wherein
the another layer (C) is a glass or a resin film.

8. A method for producing the optical film according to any one of claims 1 to 7, comprising the step of:
forming a resin layer (B) on a translucent base (A) so that the resin layer (B) satisfies the equation (1), wherein
the resin layer (B)-forming comprises the steps of:
coating a resin layer-forming coating liquid on the translucent base (A); and
drying the coated resin layer-forming coating liquid to form a coating film, and
the resin layer-forming coating liquid comprises a resin being a copolymer of an oligomer having a functional group and a monomer, a silicon element-containing additive as a surface modifier, and a diluting solvent.

9. The method according to claim 8, wherein
the resin layer (B)-forming further comprises the step of:
curing the coating film.

10. The method according to any one of claims 8 or 9, wherein
the diluting solvent includes MIBK (methyl isobutyl ketone) and cyclopentanone.

11. An optical member comprising the optical film according to any one of claims 1 to 7.

12. The optical member according to claim 11, which is a polarizing plate.

13. An image display device comprising:

the optical film according to any one of claims 1 to 7; or
the optical member according to claim 11 or 12.