

ABSTRACT

POLYMER, RESIN COMPOSITION, ANTIFOULING COATING MATERIAL
COMPOSITION, METHOD FOR PRODUCING POLYMER, METHOD FOR
5 FORMING STRUCTURE FOR STABILIZING CARBAMATE ON SURFACE OF
COATING FILM, AND METHOD FOR REGENERATING STRUCTURE FOR
STABILIZING CARBAMATE ON SURFACE OF COATING FILM

Provided are a polymer, a resin composition, and an antifouling coating material
10 composition which are capable of forming a coating film having both of water resistance
and antifouling properties resulting from superhydrophilicity; a method for producing the
polymer; a method for forming a structure for stabilizing a carbamate on a surface of a
coating film using the polymer; and a method for regenerating a structure for stabilizing a
carbamate on a surface of a coating film using the polymer. The polymer having a
15 structure which reacts with CO₂ in the presence of water and stabilizes a formed
carbamate, in which Expression (1) is satisfied.

Contact angle in water after reaction with CO₂ - contact angle in water before
reaction with CO₂ $\geq 10 \cdots$ Expression (1)

20 [No suitable figure]