

ABSTRACT OF THE DISCLOSURE
IMPRINT APPARATUS AND ARTICLE MANUFACTURING METHOD

An imprint apparatus forms a pattern by curing a radical polymerizable imprint material by irradiating the imprint material with light in a state in which a mold is brought into contact with the imprint material. The apparatus includes an irradiator configured to irradiate the imprint material with light, and a controller configured to control the irradiator. Letting I_c be an illuminance of the light with which the imprint material is irradiated, t_c be a time during which the imprint material is irradiated with the light, k be a coefficient, and PD be a target degree of photopolymerization of the imprint material subjected to irradiation with the light, the controller determines the irradiation time in accordance with: $PD = k \times (\sqrt{I_c}) \times t_c$.

Fig. 3