

ABSTRACT

POLYMERIZATION REACTION APPARATUS AND
METHOD OF PRODUCING METHACRYLATE POLYMER BY USING THE SAME

5 The present invention provides a polymerization
reaction apparatus which can suppress contaminations of a
monomer and a produced polymer. Disclosed is a
polymerization reaction apparatus comprising a
polymerization reaction vessel 10 for performing the
10 polymerization reaction of a raw material mixture
containing monomer; a rotatable shaft 20; a stirring blade
22 fixed to the rotatable shaft 20, which stirs the raw
material mixture within the polymerization reaction vessel
10; and a shaft seal bearing part 30 which supports the
15 shaft 20, wherein a shaft seal portion 32 in the shaft seal
bearing part 30 comprises a mechanical seal which contains
at least one mechanical seal liquid selected from the group
consisting of adipate esters, phthalate esters,
diisobutyrate esters and acetylated glycerides.

20
Figure 1