Fig. 1 (Prior Art)

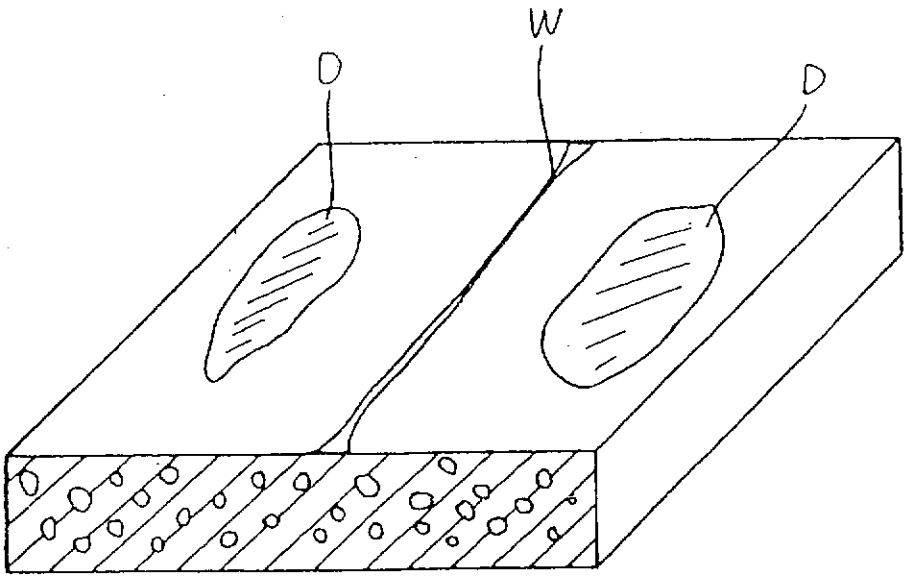


Fig. 2 (Prior Art)

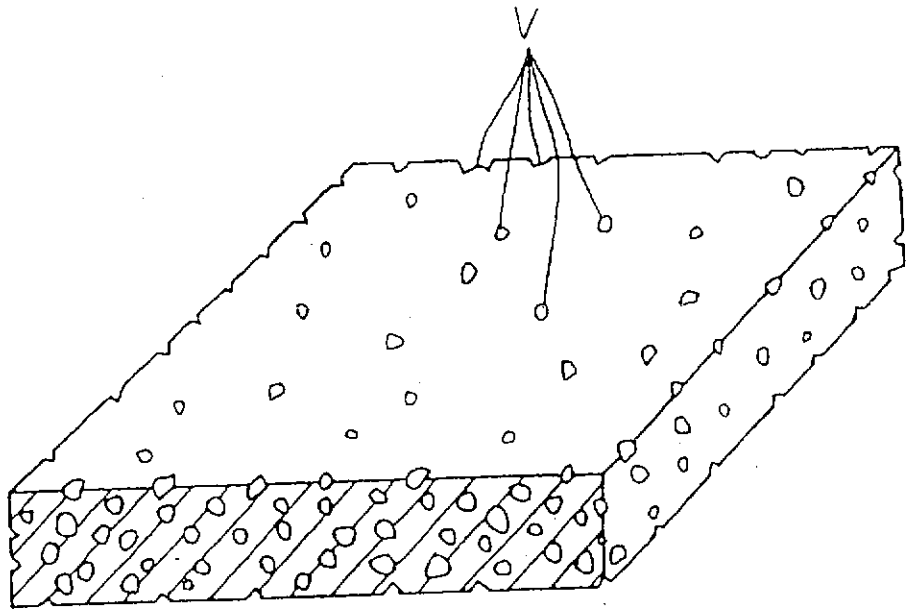


Fig. 3

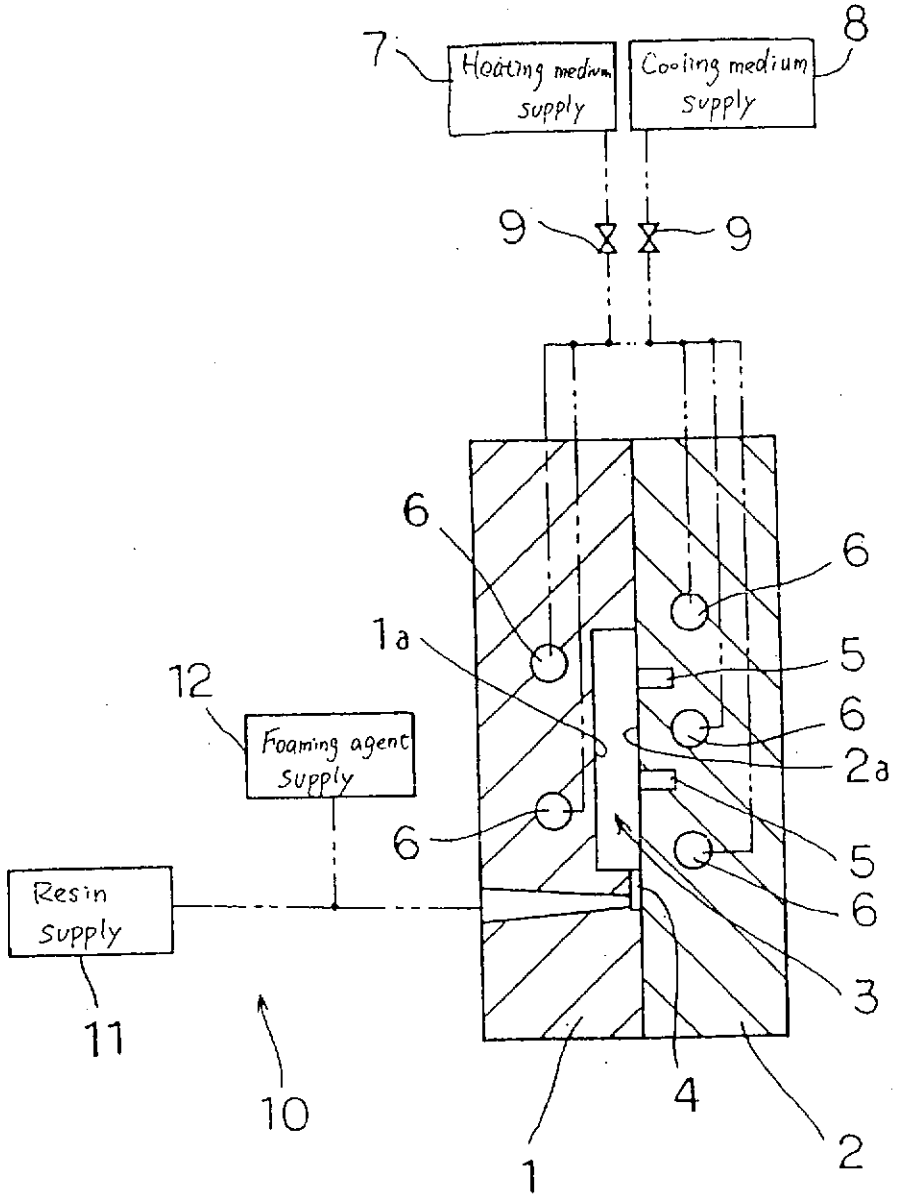

7
Heating medium supply
8
Cooling medium supply
9
9
6
6
1a
5
12
6
Foaming agent supply
2a
6
5
Resin supply
6
3
11
10
4
2
1

Fig. 4

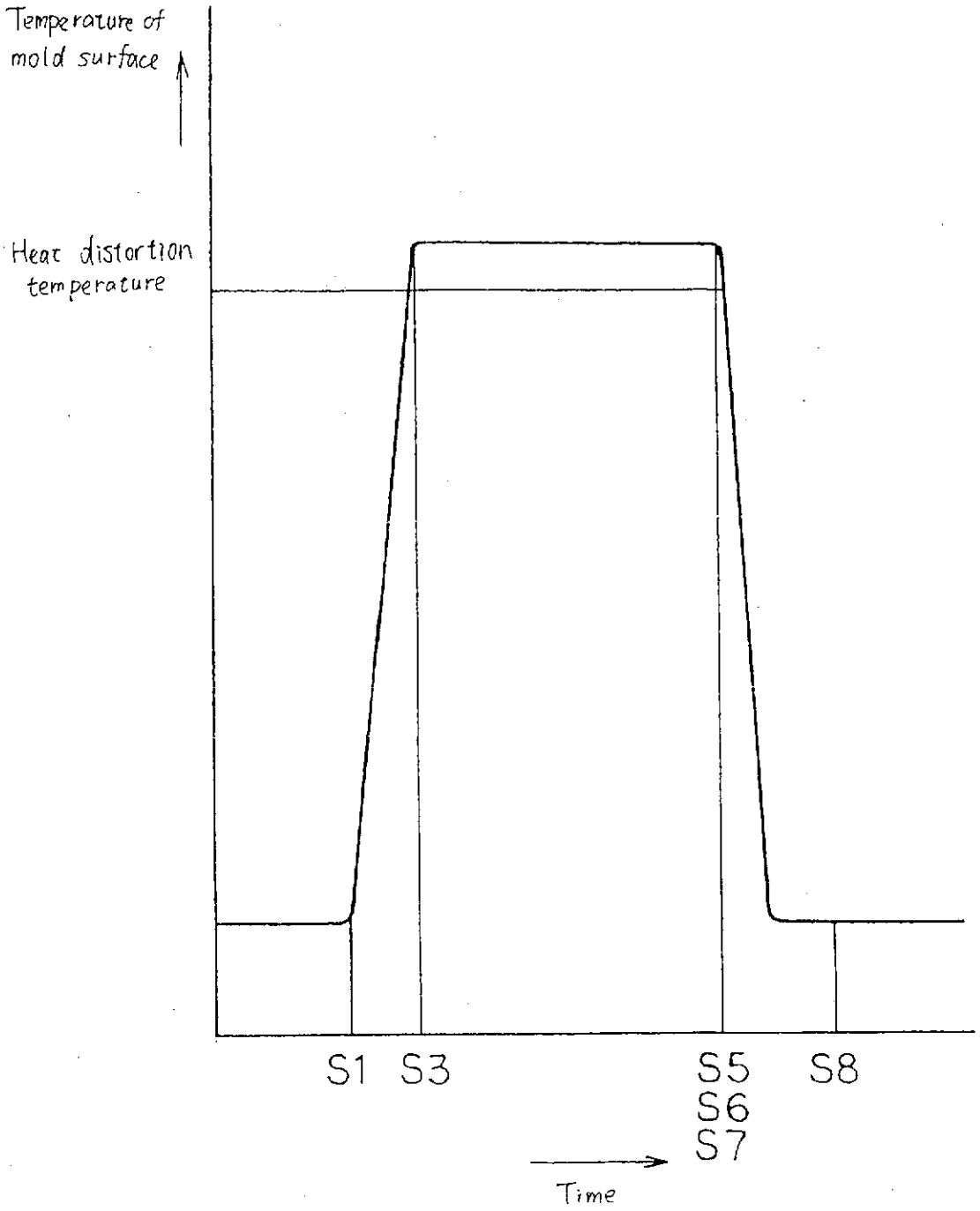

Temperature of mold surface
Heat distortion temperature
S1
S3
S5
S6
S7
S8
Time

Fig. 5

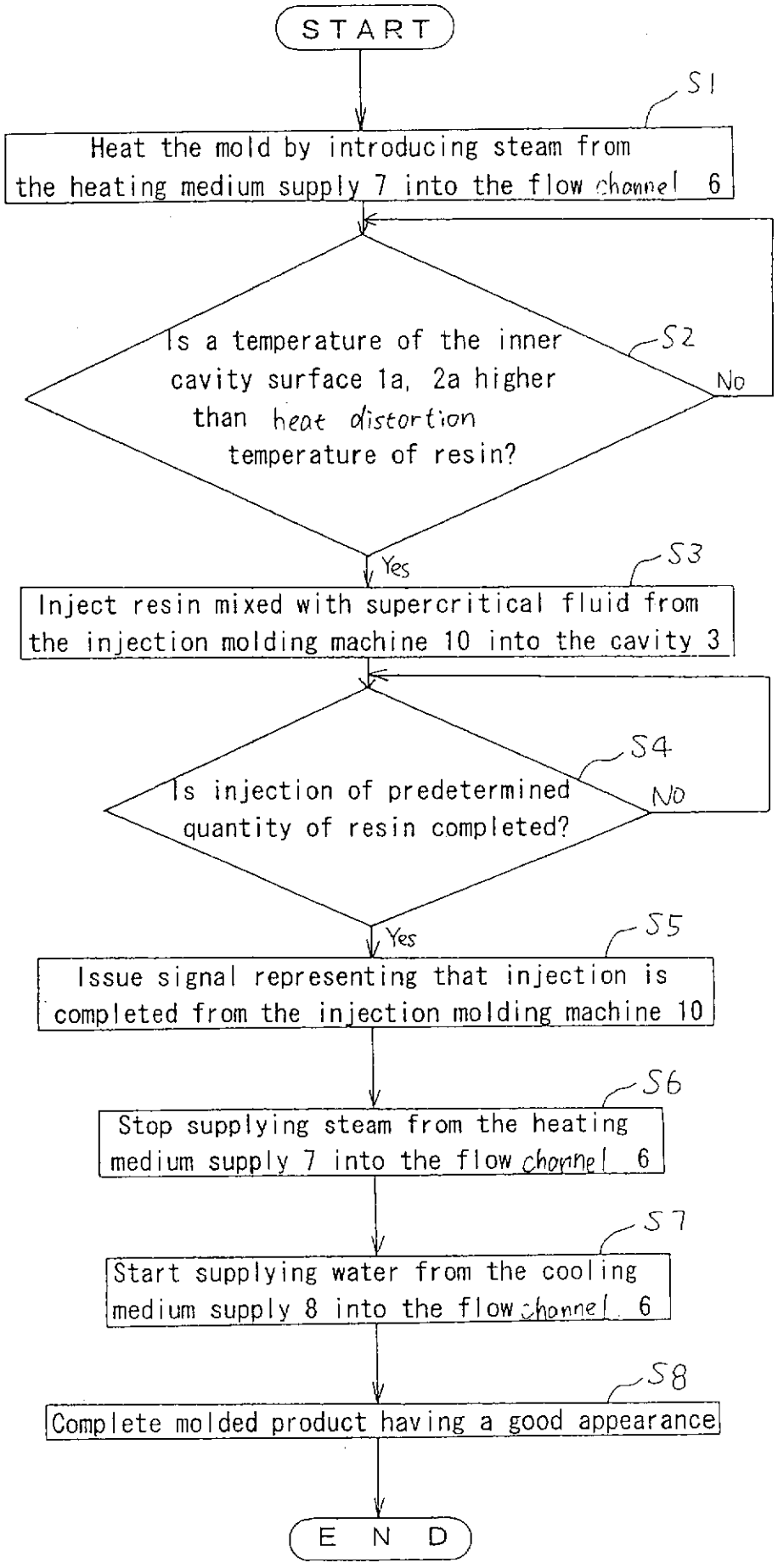

START
S1
Heat the mold by introducing steam from the heating medium supply 7 into the flow channel 6
S2
Is a temperature of the inner cavity surface 1a, 2a higher than heat distortion temperature of resin?
No
Yes
S3
Inject resin mixed with supercritical fluid from the injection molding machine 10 into the cavity 3
S4
Is injection of predetermined quantity of resin completed?
NO
Yes
S5
Issue signal representing that injection is completed from the injection molding machine 10
S6
Stop supplying steam from the heating medium supply 7 into the flow channel 6
S7
Start supplying water from the cooling medium supply 8 into the flow channel 6
S8
Complete molded product having a good appearance
E N D

Fig. 6

