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(21) 10-2007-0135497

(22) 2007 12 21 (72)

2007 12 21

(65) 10-2009-0067739 391-2

(43) 2009 06 25 (74)

(56)

KR1020070021821 A
KR1020060131178 A
KR1020040023601 A
JP08035710 A

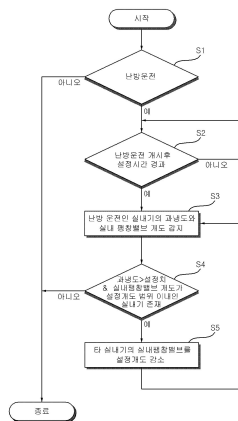
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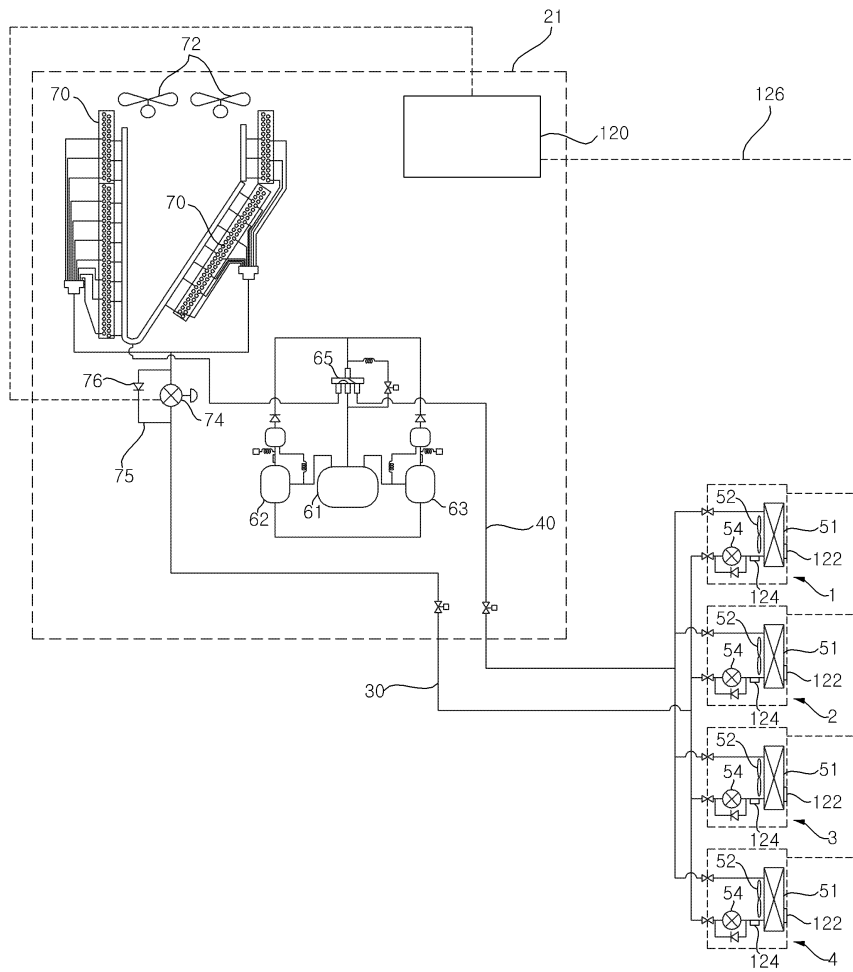
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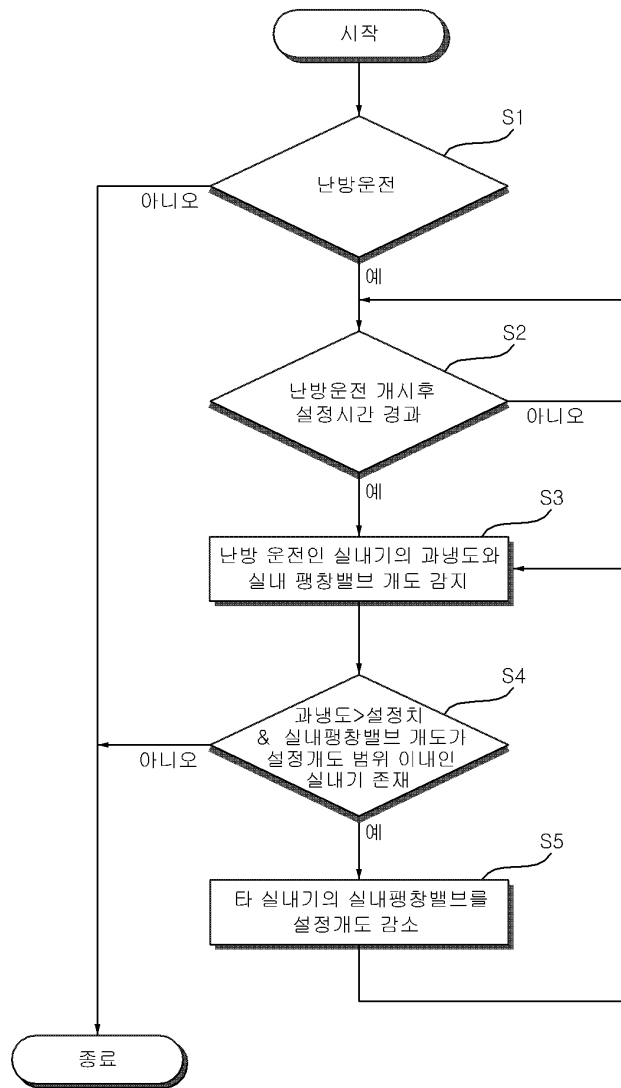
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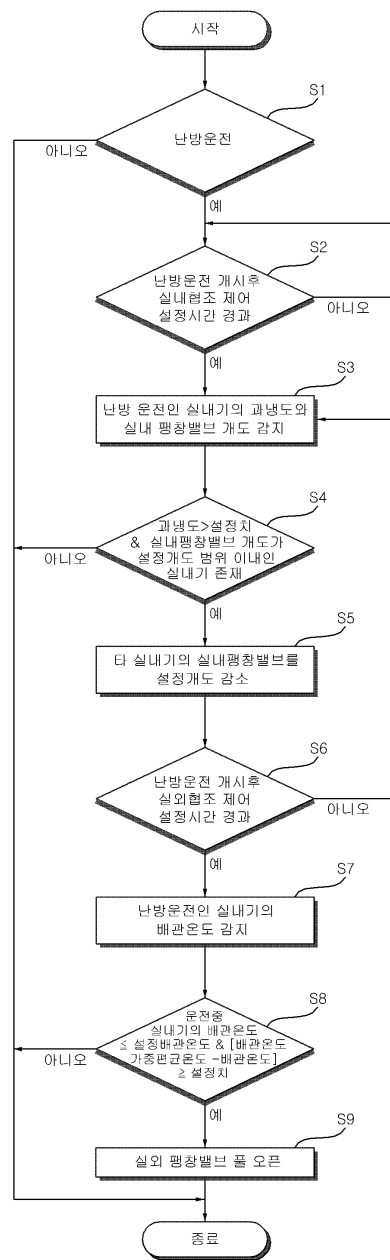
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