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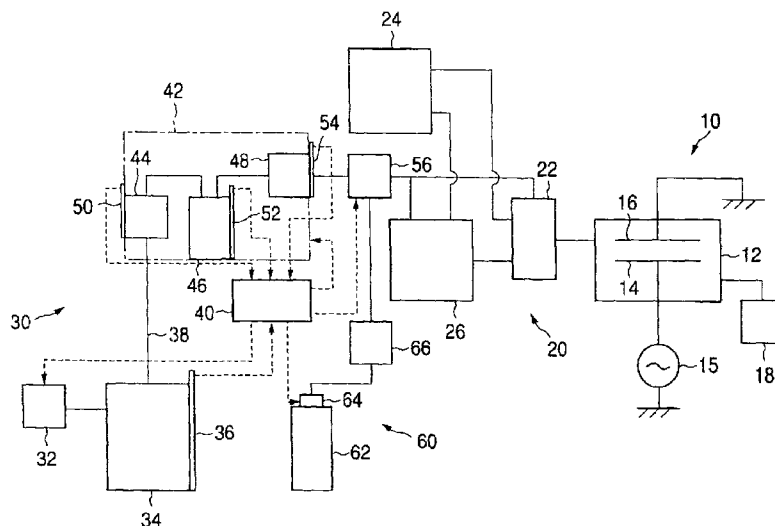
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(54) Title: APPARATUS FOR THE GENERATION AND SUPPLY OF FLUORINE GAS



(57) Abstract: To provide an apparatus for fluorine gas generation and supply that is disposed in the gas supply system of a semiconductor processing system and that in the event of abnormalities in the apparatus enables back up by a safe and inexpensive structure. An apparatus 30 for the generation and supply of gas is disposed in the gas supply system of a semiconductor processing system. This apparatus 30 contains an electrolytic cell 34 that generates fluorine gas and a cylinder 62 that holds a substitute gas selected from the group consisting of nitrogen fluoride, sulfur fluoride, and chlorine fluoride. The electrolytic cell 34 and cylinder 62 are connected to a gas switching section 56 that selectively supplies a gas utilization section with fluorine gas from the electrolytic cell 34 or with substitute gas from the cylinder 62. A controller 40 controls the gas switching section 56 in such a manner that, upon detection of an abnormal state at the electrolytic cell 34 or in the gas supply path by detectors 36, 72, substitute gas is supplied from the cylinder 62 to the gas utilization section.

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