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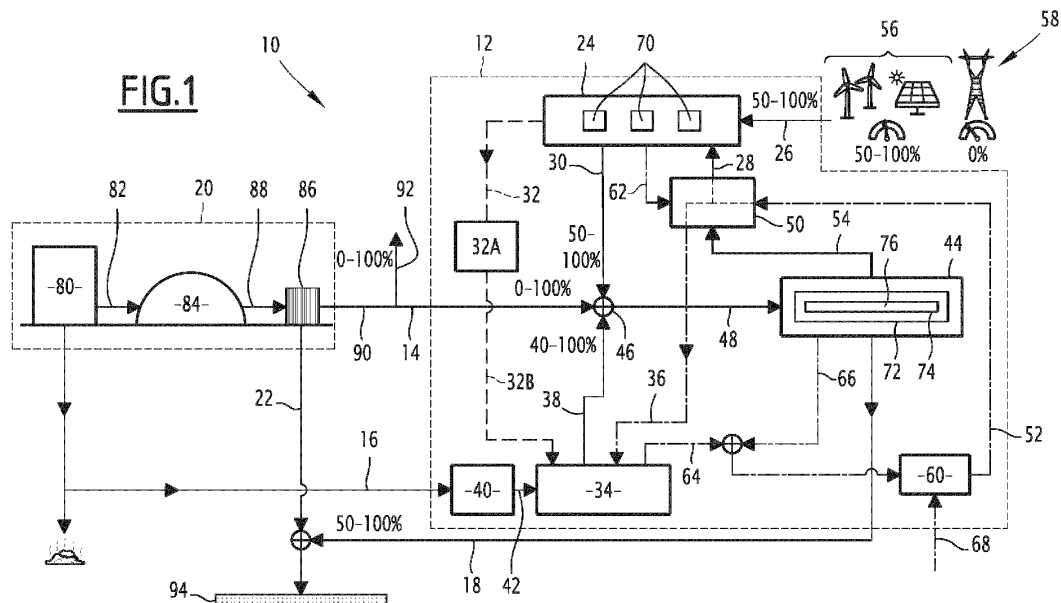
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(54) Title: AN INSTALLATION ADAPTED FOR PROCESSING A CO₂ RICH GAS AND WASTES CONTAINING ORGANIC
MATTER, AND FOR PRODUCING A METHANE RICH GAS USING RENEWABLE ENERGY



(57) Abstract: An installation (10) comprising: - an electrolysis unit (24) for receiving power (26) and steam (28), and for producing a hydrogen rich gas (30), - a gasification unit (34) for receiving wastes (16) containing organic matter, and an oxygen rich gas (32B), and for producing syngas (38), - a catalytic methanation unit (44) for receiving a CO₂ rich gas (14), said hydrogen rich gas and said syngas, and for producing a methane rich gas (18), - a steam generation unit (50) for receiving heat (54) from the catalytic methanation unit (44), and producing said steam. The installation is adapted for switching at least between a first operating mode, in which said power is intended to be fully renewable, and a second operating mode, in which said power is at a lower level and is intended to be renewable and/or from an electricity grid (58).

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- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
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