

Title (en)
Recovery of energy from waste gas streams.

Title (de)
Energierückgewinnung aus Abgasströmen.

Title (fr)
Récupération de l'énergie de courants de gaz perdus.

Publication
EP 0056710 A2 19820728 (EN)

Application
EP 82300189 A 19820114

Priority
GB 8101191 A 19810115

Abstract (en)
In an iron- or steel-making plant comprising a metallurgical processing vessel (1) from which, in operation of the plant, there issues a stream of waste gas at superatmospheric pressure and elevated temperature, there is provided means for recovering energy from the waste gas stream. This energy recovering means comprises means (6, 12) for supplying the gas stream to the inlet of a gas expander (16) which includes a rotor (18) drivable by the gas stream and comprising an output drive shaft (22), an alternating current generator (28) arranged to be driven by the shaft (22), and a voltage and frequency converter (32) having its input side connected to the electrical output of the generator (28) and its output side connected to an electrical power network (5). The converter (32) is of the kind which, over a predetermined range of the speed of rotation of the generator (28), delivers at its output side electric power at a voltage and frequency which at all times conform to the voltage and frequency of the network (5).

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IPC 8 full level
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DE FR

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EP 0056710 A2 19820728; **EP 0056710 A3 19840328**; BR 8200062 A 19821026; ES 508728 A0 19830501; ES 8401778 A1 19830501; JP S57151026 A 19820918; PT 74279 A 19820201; PT 74279 B 19830823

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EP 82300189 A 19820114; BR 8200062 A 19820107; ES 508728 A 19820114; JP 404282 A 19820116; PT 7427982 A 19820114