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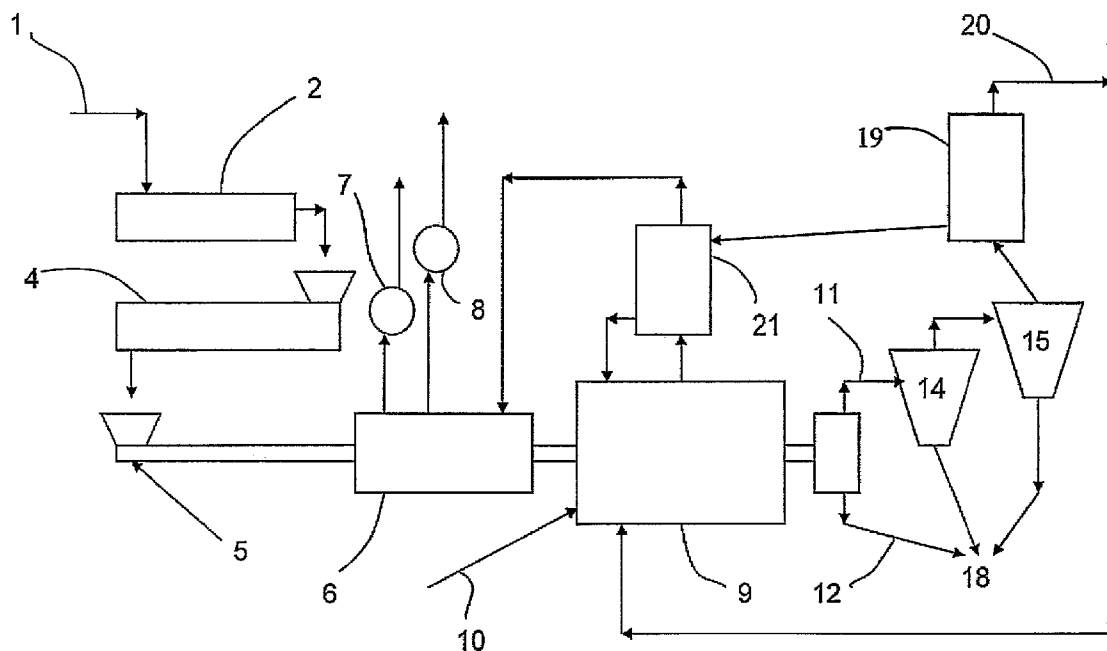
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**Declarations under Rule 4.17:**

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
- of inventorship (Rule 4.17(iv))

[Continued on next page]

(54) Title: METHOD FOR STEAM REFORMING CARBONACEOUS MATERIAL



(57) Abstract: A method for steam reforming carbonaceous material into a synthesis gas by using a single stage process of heating the carbonaceous material in a rotary kiln at an elevated reforming temperature so that the carbonaceous material undergoes substantially complete conversion to synthesis gas or by using a dual stream, multiple-stage process of heating carbonaceous material to a reforming temperature, below that at which metallic materials will typically vaporize, to form gaseous and solid materials; further reforming the gaseous materials in a second stage reforming kiln at an elevated reforming temperature to form synthesis gas; and separating carbon char from the solid material for further processing.

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