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(54) Title: MULTI-STAGE CIRCULATING FLUIDIZED BED SYNGAS COOLING

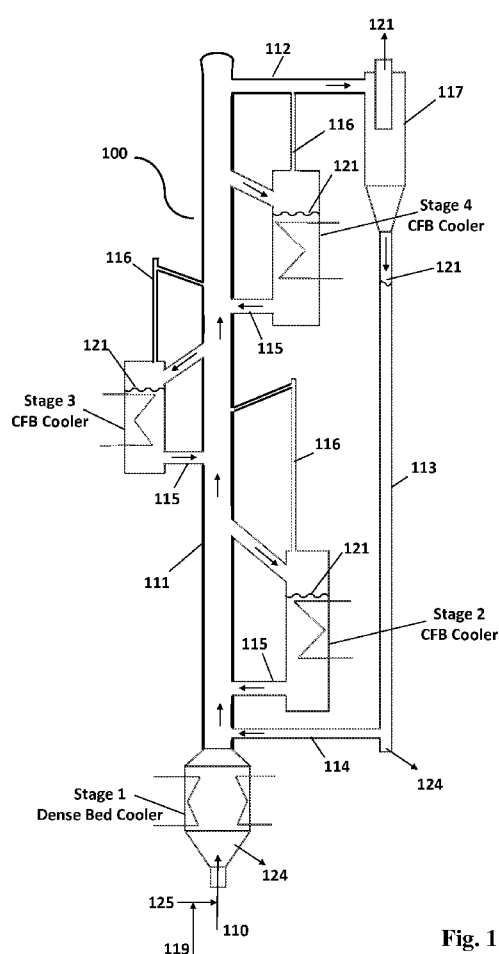


Fig. 1

(57) Abstract: A method and apparatus for cooling hot gas streams in the temperature range 800°C to 1600°C using multi-stage circulating fluid bed (CFB) coolers is disclosed. The invention relates to cooling the hot syngas from coal gasifiers in which the hot syngas entrains substances that 5 foul, erode and corrode heat transfer surfaces upon contact in conventional coolers. The hot syngas is cooled by extracting and indirectly transferring heat to heat transfer surfaces with circulating inert solid particles in CFB syngas coolers.



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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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