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Declarations under Rule 4.17:

- *as to the identity of the inventor (Rule 4.17(i))*
- *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))*

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stream by a flashing process or by a stripping process, to provide a methane rich gas phase and a liquid product stream of hydrocarbons, wherein the methane rich gas phase has a higher concentration of methane than the gas phase of the methane donor stream. This has the associated benefit of such a process being efficient in reducing the amount of methane in the recycle gas stream, which enables an increased partial pressure of hydrogen by facilitating release of methane in a separate stream.