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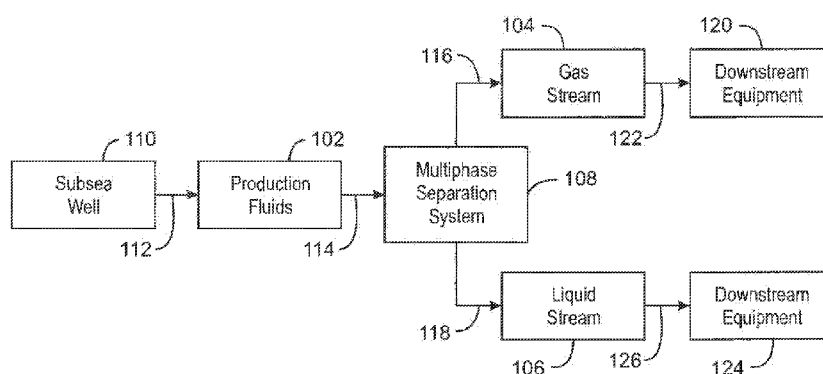
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## Declarations under Rule 4.17:

- 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))

[Continued on next page]

(54) Title: MULTIPHASE SEPARATION SYSTEM

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FIG. 1

(57) Abstract: A system and method for separation of liquids and gases within a multiphase fluid are provided herein. The method includes flowing a multiphase fluid into a circular distribution header of a multiphase separation system and separating the multiphase fluid into gases and liquids within the circular distribution header. The method also includes flowing the gases into a circular gas header that is above a plane of the circular distribution header and flowing the liquids into a circular liquid header that is below the plane of the circular distribution header. The method further includes flowing the gases out of the multiphase separation system via a gas outlet line and flowing the liquids out of the multiphase separation system via a liquid outlet line, wherein entrained liquids within the gas outlet line are flowed to the liquid outlet line via a downcomer.

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