

ABSTRACT**APPARATUS AND METHOD**

- 5 A gas conversion apparatus (100) for converting a first gas to one or more other gases comprises: means (105) for introducing first gas into a liquid medium in a column (125); and an ultrasonic energy generator (140) arranged to generate ultrasonic energy, the apparatus (100) being configured to launch ultrasonic energy generated by the generator (140) into the liquid medium such that first gas is exposed to ultrasonic energy, the apparatus (100) being
- 10 arranged to allow collection of first gas that has been exposed to ultrasonic energy. The apparatus (100) also preferably comprises a microbubble generator (120) to generate microbubbles of the first gas for exposure to the ultrasonic energy. The ultrasonic energy generator (140) may be configured to generate ultrasonic energy as a consequence of a flow of a drive gas therethrough.

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[Figure 1]