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(54) **THERMOSTABLE CARBONIC ANHYDRASES AND METHODS OF USE THEREOF**

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CPC . ***C12N 9/88*** (2013.01); ***C02F 3/342*** (2013.01); ***C12Y 402/01001*** (2013.01); *Y02E 50/343* (2013.01)

(58) **Field of Classification Search**
None
See application file for complete search history.

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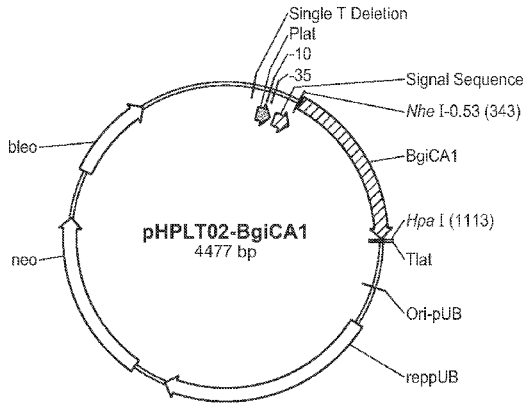
(57) **ABSTRACT**

The present compositions and methods relate to a thermostable carbonic anhydrases, polynucleotides encoding the carbonic anhydrase, and methods of make and/or use thereof. Formulations containing the carbonic anhydrase are suitable for use in extracting carbon dioxide.

10 Claims, 29 Drawing Sheets