

Title (en)  
SYSTEMS AND METHODS FOR PROCESSING GASES

Title (de)  
SYSTEM UND VERFAHREN ZUR VERARBEITUNG VON GASEN

Title (fr)  
SYSTÈMES ET PROCÉDÉS POUR TRAITER DES GAZ

Publication  
**EP 4093538 A4 20230712 (EN)**

Application  
**EP 21743714 A 20210122**

Priority

- US 202062964977 P 20200123
- US 202062969494 P 20200203
- US 202062986998 P 20200309
- US 202063019851 P 20200504
- US 202063052524 P 20200716
- US 2021014563 W 20210122

Abstract (en)  
[origin: WO2021150859A1] The invention includes a gas processing system for transforming a hydrocarbon-containing inflow gas into outflow gas products, where the system includes a gas delivery subsystem, a plasma reaction chamber, and a microwave subsystem, with the gas delivery subsystem in fluid communication with the plasma reaction chamber, so that the gas delivery subsystem directs the hydrocarbon-containing inflow gas into the plasma reaction chamber, and the microwave subsystem directs microwave energy into the plasma reaction chamber to energize the hydrocarbon-containing inflow gas, thereby forming a plasma in the plasma reaction chamber, which plasma effects the transformation of a hydrocarbon in the hydrocarbon-containing inflow gas into the outflow gas products, which comprise acetylene and hydrogen. The invention also includes methods for the use of this gas processing system.

IPC 8 full level  
**B01J 19/12** (2006.01); **B01J 8/06** (2006.01); **B01J 19/08** (2006.01); **C07C 2/80** (2006.01); **C07C 11/24** (2006.01); **C07C 17/08** (2006.01); **C07C 21/06** (2006.01); **C10G 15/12** (2006.01); **C10G 47/22** (2006.01); **C10H 15/06** (2006.01)

CPC (source: EP KR)  
**B01J 8/067** (2013.01 - EP KR); **B01J 19/088** (2013.01 - EP KR); **C07C 2/80** (2013.01 - EP KR); **C07C 11/24** (2013.01 - KR); **C07C 17/08** (2013.01 - EP KR); **C07C 21/06** (2013.01 - KR); **B01J 2219/0869** (2013.01 - EP KR); **B01J 2219/0875** (2013.01 - EP KR); **B01J 2219/0884** (2013.01 - EP KR); **B01J 2219/0898** (2013.01 - EP KR); **Y02P 20/582** (2015.11 - EP KR)

Citation (search report)

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- [YA] US 2019185325 A1 20190620 - TANNER DAVID [US], et al
- See references of WO 2021150859A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2021150859 A1 20210729**; AU 2021210948 A1 20220811; CA 3165030 A1 20210729; CN 115209984 A 20221018; EP 4093538 A1 20221130; EP 4093538 A4 20230712; JP 2023511389 A 20230317; KR 20220122788 A 20220902

DOCDB simple family (application)  
**US 2021014563 W 20210122**; AU 2021210948 A 20210122; CA 3165030 A 20210122; CN 202180018520 A 20210122; EP 21743714 A 20210122; JP 2022544358 A 20210122; KR 20227028967 A 20210122