

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5951092

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	MR GEORGE W BRALY	02/06/2020
RECEIVING PARTY DATA		
Name:	GENERAL AVIATION MODIFICATIONS, INC.	
Street Address:	2800 AIRPORT ROAD	
City:	ADA	
State/Country:	OKLAHOMA	
Postal Code:	74820	
PROPERTY NUMBERS Total: 1		
	Property Type	Number
	Patent Number:	10260016
CORRESPONDENCE DATA		
Fax Number:	(253)859-8915	
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>		
Phone:	253-859-9128	
Email:	usptomail@earthlink.net	
Correspondent Name:	RADFORD GOODLOE	
Address Line 1:	24722 104TH AVENUE SE	
Address Line 2:	SUITE 102	
Address Line 4:	KENT, WASHINGTON 98030-5322	
ATTORNEY DOCKET NUMBER:	GA4-3612-U1-C1	
NAME OF SUBMITTER:	VALERIE MCMANUS	
SIGNATURE:	/VALERIE MCMANUS/	
DATE SIGNED:	02/06/2020	
Total Attachments: 5		
source=ASSIGNMENT_PATENT_10260016B2_EXECUTED_3612U1C1#page1.tif		
source=ASSIGNMENT_PATENT_10260016B2_EXECUTED_3612U1C1#page2.tif		
source=ASSIGNMENT_PATENT_10260016B2_EXECUTED_3612U1C1#page3.tif		
source=ASSIGNMENT_PATENT_10260016B2_EXECUTED_3612U1C1#page4.tif		
source=ASSIGNMENT_PATENT_10260016B2_EXECUTED_3612U1C1#page5.tif		

For: ☐ U.S. and/or ☐ Foreign Rights
For: ☐ U.S. Application or
☐ U.S. Provisional Application
For: ☒ U.S. PATENT
For: ☐ PCT Application
By: ☒ Inventor(s) or ☐ Present Owner

ASSIGNMENT OF PATENT

THIS ASSIGNMENT OF PATENT is made effective as of the 16th day of April, 2019.

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of TEN US (US \$10.00) DOLLARS, and for other good and valuable consideration, the receipt of which is hereby acknowledged,

ASSIGNOR:

Inventor(s) or person(s) or
entit(ies) who own the patent

GEORGE W. BRALY
type or print name of ASSIGNOR

2800 Airport Road
ADA, Oklahoma, 74820
Address
US
Nationality

HEREBY ASSIGNS AND TRANSFERS TO

ASSIGNEE:

GENERAL AVIATION MODIFICATIONS, INC.
type or print name of ASSIGNEE

2800 Airport Road
ADA, Oklahoma, 74820
Address
An Oklahoma Corporation
Nationality

and the successors, assigns and legal representatives of the ASSIGNEE,

- ☒ the entire right, title and interest
- ☒ and in all foreign countries, including all rights to claim priority,

in U.S. Patent No.: 10,260,016 B2 issued April 16, 2019, (the face page of which is attached hereto as Exhibit 1), and in and to any and all improvements which are disclosed therein, for the invention entitled:

HIGH OCTANE UNLEADED AVIATION GASOLINE


Name of Inventor: George W. BRALY

(1) ASSIGNOR hereby warrants, represents, and covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this Assignment.

(2) This Assignment includes all of the ASSIGNOR'S right to all income, royalties, damages, and payments now or hereafter due and payable, and in and to all causes of action, either in law or in equity, and the right to sue, counterclaim and recover for past, present, and future infringement of the rights assigned under this Assignment, as fully and entirely as the same would have been held and enjoyed by the ASSIGNOR if this sale and assignment had not been made.

(3) ASSIGNOR further covenants that ASSIGNOR will, upon ASSIGNEE'S request, promptly provide all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR, and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all proper papers, instruments, or affidavits required (1) to maintain and enforce said Letters Patent, (2) to apply for, obtain, issue, and maintain any continuation, division, renewal, reissue, re-examination, or substitute thereof, and (3) maintain and enforce any Letters Patent on any reissue or re-examination thereof, or which may otherwise be necessary or desirable to carry out the purposes hereof.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on the date shown below.

Date: Feb 61 2020	 GEORGE W. BRALY ASSIGNOR
----------------------	---

☒ Notarization or Legalization Page added.

EXHIBIT 1



US010260016B2

(12) **United States Patent**
Brady

(10) **Patent No.:** **US 10,260,016 B2**
(45) **Date of Patent:** **Apr. 16, 2019**

(54) **HIGH OCTANE UNLEADED AVIATION GASOLINE**

(73) Applicant: **George W. Brady, Ada, OK (US)**

(72) Inventor: **George W. Brady, Ada, OK (US)**

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 614 days.

(21) Appl. No.: **13/841,560**

(22) Filed: **Mar. 15, 2013**

(65) **Prior Publication Data**

US 2014/0116367 A1 May 1, 2014

Related U.S. Application Data

(63) Continuation-in-part of application No. 12/958,590, filed on Dec. 1, 2010, now Pat. No. 8,628,594.

(60) Provisional application No. 61/265,606, filed on Dec. 1, 2009, provisional application No. 61/316,158, filed on Mar. 22, 2010, provisional application No. 61/319,255, filed on Mar. 30, 2010.

(51) Int. Cl.
C10L 10/10 (2006.01)
C10L 1/223 (2006.01)
C10L 1/06 (2006.01)
C10L 1/14 (2006.01)
C10L 1/16 (2006.01)

(52) U.S. Cl.
CPC C10L 1/223 (2013.01); C10L 1/06 (2013.01); C10L 1/14 (2013.01); C10L 10/10 (2013.01); C10L 1/160A (2013.01); C10L 2270/023 (2013.01); C10L 2270/04 (2013.01)

(58) **Field of Classification Search**
CPC C10L 2270/04; C10L 2270/023; C10L 10/10; C10L 2230/22; C10L 2200/0423
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,205,501 A 2/1974 Dyer
1,771,362 A 2/1928 Madgley, Jr.
4,292,873 A 7/1979 Madgley, Jr.
4,897,862 A 11/1990 Katsenog et al.
4,685,431 A 11/1990 Hamby
4,712,586 A 3/1992 Borzhavsky
4,741,012 A 12/1992 Maier
4,994,362 A 2/1992 Borg
2,394,180 A 2/1948 Iman
2,430,197 A 4/1949 Staley
3,489,136 A 10/1966 Samaha et al.
2,410,840 A 11/1948 Walters
2,412,262 A 12/1948 Stinton
2,476,115 A 7/1950 Morrison
2,568,602 A 7/1951 Schulze
3,637,637 A 9/1973 McLaughlin
2,917,161 A 12/1959 Fry
3,212,267 A 10/1965 Cockshott
4,010,358 A 3/1977 Morris
4,786,247 A 3/1983 Rutledge et al.

4,294,187 A 8/1971 Smith
4,331,624 A 5/1981 Child, et al.
4,408,512 A 10/1983 Stucken
4,852,207 A 6/1994 Moore, Jr.
4,628,292 A 9/1987 Ostberg
6,297,037 A 12/1999 Natta et al.
5,077,284 A 2/1992 Scherer et al.
5,125,335 A 6/1992 Vongachari et al.
5,284,004 A 2/1994 Dossan et al.
4,130,111 B 5/1994 Townsend et al.
5,385,288 A 10/1993 Townsend et al.
5,470,158 A 11/1993 Goughan
5,853,896 A 8/1997 Jeany et al.
5,851,241 A 12/1998 Strubinsky et al.
5,871,202 A 4/1999 Duran et al.
5,925,152 A 7/1999 Duran et al.

(Continued)

FOREIGN PATENT DOCUMENTS

JP 2008-11208 B2 3/2011
JP 2012-211 6/2008

(Continued)

OTHER PUBLICATIONS

Division, Hixon, Integrating Knock Time (patent) Paper 2010-01, Mechanical Engineering Department, WSSU Fall 2003.
Mitsui, Oct. 10-21, 2003, University of California (24 pages).
Cummings, H.P., Detonation Rating of Aviation Fuels, 17 World Petroleum Congress, Vol. 18-24, 1933, London, UK (13 pages).
AVGAS Review—APR. 2007, Allison Clarke, 2007 Aviation Photo Communication, APC, Mar. 31, 2007 (27 pages).
Research Summary, CRC Research Report, Unleaded High Density Aviation Gasoline, A Report by the CRC Unleaded AVGAS Development Panel, Apr. 24, 2009 (2 pages).
Mason, David, Fuel Grade Engine Detonation Tests of 97 Unleaded, High-Octane Blends, Sep. 1998, Final Report, CR-119-A-98-000400 (287 pages).

(Continued)

Primary Examiner: Ellen M. McCreary
Assistant Examiner: Ming Ching Po
(74) Attorney, Agent, or Firm: R. Reams Goo-Hoac, Jr.

(57) **ABSTRACT**

Unleaded aviation gasoline. An aviation gasoline fuel blend includes an unleaded aviation gasoline base fuel, with an effective amount of selected alkyl benzenes to improve the functional engine performance to avoid harmful detonation sufficient to meet or exceed selected standards for detonation performance requirements in full scale aircraft piston spark ignition engines designed for use with Grade 100L avgas. Selected alkyl benzenes such as 1,3-dimethylbenzene, and/or 1,3,5-trimethylbenzene, or other mixtures thereof, may be used. Suitable alkylated benzenes may include a mixture of xylene isomers. Aromatic amines, such as n-toluidine, may also be added to increase MON. Base fuels may be a high quality aviation alkylate, or may be a commercial iso-octane, or a mixture of high quality aviation alkylate enhanced by commercial iso-octane, and may include iso-pentane or butane or both iso-pentane and butane in sufficient quantity to provide appropriate vapor pressure for the final fuel blend.

5 Claims, No Drawings

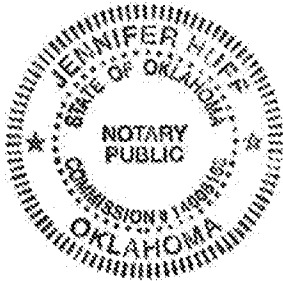
INSTRUMENT: ASSIGNMENT OF PATENT
U.S. PATENT NO.: 10,260,016 B2
ISSUE DATE: APRIL 16, 2019

STATE OF OKLAHOMA)
COUNTY OF Pottawatomie) ss.

Before me this 6 day of Feb, 2020, personally appeared GEORGE W. BRALEY to me personally known to be the person who is described in and who executed the above instrument, and acknowledged to me that he executed the same of his own free will for the purpose therein set forth.

Dated: Feb 6, 2020.

(Seal or Stamp)



Jennifer Huff
Notary Signature

Jennifer Huff
Print Name

Notary Public in and for the State of Oklahoma,
residing at Ada, Pottawatomie Co
My appointment expires 9-11-22

My appointment expires _____

GENERAL AVIATION MODIFICATIONS, INC.
(An Oklahoma Corporation)

George W. Braly
Signature

By: George W. Braly

Its: Vice President

Date: Feb 6 2020

STATE OF OKLAHOMA)

COUNTY OF Pocahontas) ss.

I certify that I know or have satisfactory evidence that George W. Braly is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the Vice President of GENERAL AVIATION MODIFICATIONS, INC., to be the free and voluntary act of such party, for the uses and purposes mentioned in the instrument.

Dated: Feb 6, 2020.

(Seal or Stamp)

[Signature]
Notary Signature

Jennifer Huff
Print Name

Notary Public in and for the State of Oklahoma,
residing at Ada, Oklahoma
My appointment expires 9-11-25

