

**PHOENIX IV PROJECT:  
THE NOBLE GAS PLASMA TECHNOLOGY**

**APPENDIX B**

**"JOINT AFFIDAVIT -  
OBSERVATIONS CONCERNING  
THE PAPP INVENTION"**

**by NOLAN and HODGES**

Observations Concerning the Papp Invention

The Papp Invention is essentially a closed, reciprocating, two cylinder engine which does not require an air supply and does not emit exhaust gases. It is comparable to an automobile engine in size.

The engine is powered by a fuel mixture, which according to the inventor, containing five (5) inert gases. The engine does not use any hydrocarbon-fuel, except as a lubricant in the crankcase. The fuel is <sup>LOADED</sup> ~~introduced~~ into the piston cavities, <sup>AND IS CLAIMED TO BE THE WORKING FLUID AS WELL AS THE FUEL.</sup>

There is no cooling system, and no fuel tank. The only outside source of power that is utilized by this engine is two (2) twelve volt (12V) batteries to start the engine. Once the engine is running the two batteries can be removed. The working model is essentially the same as the working drawing <sup>SIDE</sup> (see view) which is attached as exhibit "A".

The speed of the engine is variable, using a rheostat, and was operated between 726 r.p.m. and 100 r.p.m. The engine runs quietly and is stable at any r.p.m. The noise level can be compared to a low r.p.m. electric motor.

The engine is attached to a new dynamometer capable of rating torque, R.P.M., horsepower and torquerise which carries the brand name of "ASW" and is a NEBRASKA <sup>400</sup> model, serial No. CD 879.

*[Handwritten signature]*

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The dynamometer and engine was connected by a mounting apparatus which exposes the drive line from the engine to the dynamometer. The dynamometer was checked for calibration by Mr. Dennis Hodges just prior to running the engine and was found to be properly calibrated and properly attached to the engine. The engine was operated for testing on 26 day of Feb., 1983, by the inventor.

The engine was operated for a total of 1 hrs. and 6 minutes with no apparent heating problems and without additional fuel.

During the testing the engine was operated at ~~different~~ different speeds. The first was at 700-730 r.p.m. The dynamometer reading were

RPM 726 Torque (foot pounds) 776 Horsepower 107 % of Torque Rise 418

At X R.P.M. the dynamometer readings were:  
R.P.M. X Torque (F.P.) X Horsepower X % of Torque Rise X.

At X RPM, the dynamometer readings were:  
RPM X Torque (F.P.) X Horsepower X % of Torque Rise X.

The engine was also operated at X RPM, with no load, with no apparent problems.

A F F A D A V I T

County of Cherokee  
State of Oklahoma

We, George J. Nolan and Dennis Hodges, both of legal age and being first duly sworn state as follows: We hereby certify that we witnessed the running of the engine which is described herein on the 26 day of Feb, 1983.

We also certify that everything that is stated in this document, containing THREE pages, all initialed by us, is true and correct, and that the figures written in were written by Dennis Hodges and George J. Nolan as they witnessed them during the testing.

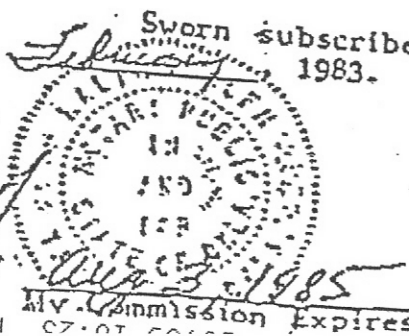
[Signature]  
Dr. George J. Nolan  
Professor of Chemistry  
Northeastern State University  
Tahlequah, Oklahoma

[Signature]  
Dennis Hodges  
Owner-Independent Diesel Service  
2101 S. Detroit  
Broken Arrow Oklahoma

Acknowledgment

Sworn subscribed to before me this 26<sup>th</sup> day of February, 1983.

[Signature]  
Notary Public



George J. Nolan, Ph.D.  
Professor of Chemistry

Employment: Presently employed at MSU, Professor of Chemistry,  
Chemistry Department.

#### EARNED DEGREES

B.S. Northeastern State College, 1958, Chemistry  
M.S. University of Arkansas, Fayetteville, 1961 Chemistry  
Ph.D. University of Arkansas, 1964 Chemistry

#### PROFESSIONAL EXPERIENCE

Research Chemist (1964-68). Research concerned new catalytic process for converting low molecular weight hydrocarbons to useful hydrocarbon derivative and developing technology for refining coal.  
Consultant for patent attorneys at Phillips Petroleum Company.  
Consultant for Arkola Sand and Gravel, a subsidiary of Ashland Oil Company.

#### RESEARCH AND PUBLICATIONS

Research: Catalysis and Electrolytic Solutions; Helped design and construct an automated catalyst testing unit which cost \$100,000; Wrote specifications for a DTA (Differential Thermal Analysis Apparatus); Constructed a TGA (Temperature Gravimetric Analysis Apparatus).

Nolan, George J., "Salt Effects in the Alkaline Hydrolysis of Potassium Ethyl Malonate," J.A.C.S. 82, 3237-8 (1960)  
Nolan, George J., "Salt Effects in the Reaction Between Bromine and Iodide Ions," J.A.C.S., 82 3233-5 (1960)  
Nolan, George J., "Rate of Alkaline Hydrolysis of Ethyl Alpha-Haloacetates in Pure and Mixed Solvents," J. of Phy. Chem., 65,1556-60 (1961).  
Nolan, George J., "Polarography of U(IV) in Ethanol-Water Systems," T. Polarog. Soc., 10(1) 7-16 (1964).

Patents: Oxidative Dehydrogenation over Stannic Phosphate Catalyst 3,320, 329 (1967); Oxidative Dehydrogenation of Monolefins 3,304,342 (1967); Dehydrogenation Process and Catalyst 3,446, 869 (1969); Dehydrogenation 3, 501, 547 (1970); Olefin Skeletal Isomerization and Catalyst, 3, 448, 164, (1969); Dehydrogenation 3, 501, 548 (1970); Dehydrogenation 3, 555, 105, (1970); Dehydrogenation of Olefins 3,580, 969 (1971); Dehydrogenation Catalysts 3, 697, 601 (1972). There are 2 more patents that I do not have the numbers of that are not included in this list.

Dennis L. Hodges  
7306 S. 231st E. Ave  
Broken Arrow, Okla.

EMPLOYMENT: Presently owner - Independent Diesel Service  
2101 S Detroit  
Broken Arrow, OK

EXPERIENCE: 1965 to 1976 Operating dynameter for United  
Engine Shop, 7454 E. 41st St., Tulsa, Oklahoma,  
Testing engines and Transmissions.  
1976 to Present - Owner of Independent Diesel Service