Dec. 8, 1964 I. W. KUSISTO 3,160,203

VAPOR LOCK SUPPRESSOR

Filed June 4, 1962

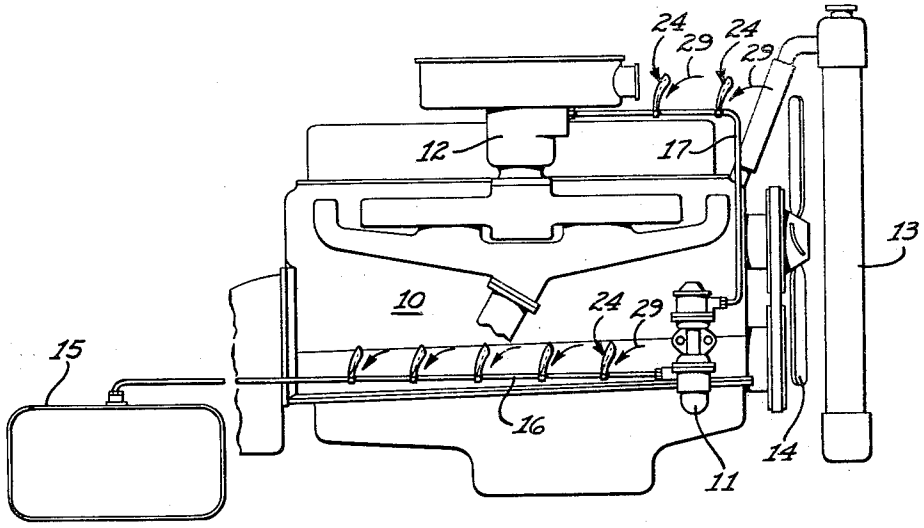


FIG. 1

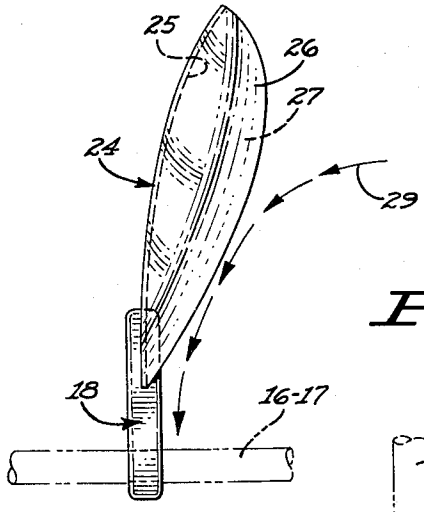


FIG. 3

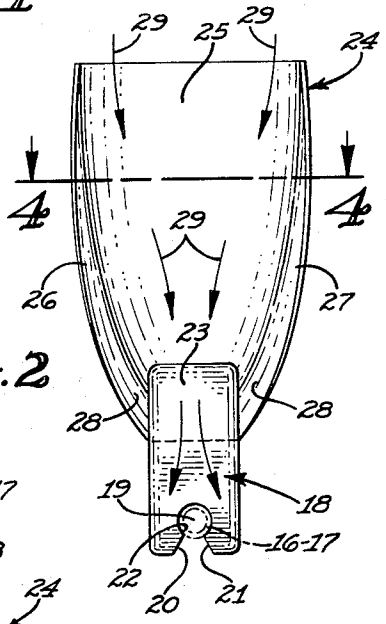


FIG. 2

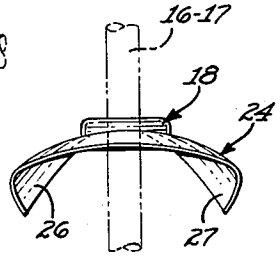


FIG. 4

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VAPOR LOCK SUPPRESSOR

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1 Claim. (Cl. 165—51)

This invention pertains to a vapor lock suppressor and is particularly directed to a device to keep the fuel in gasoline lines cool to prevent vaporization of the gasoline in hot weather operation of motor vehicles.

One of the objects of this invention is to provide a vapor lock suppressor which is inexpensive and effective to control the temperature in gasoline supply lines to motor vehicles.

Another object is to provide a vapor lock suppressing device which is easy to install and maintain in proper operation.

A further object is to provide a vapor lock suppressor which may be placed at a plurality of spaced positions along a gasoline line to provide maximum air circulation of the line for cooling purposes.

Further features and advantages of this invention will appear from a detailed description of the drawings in which:

FIG. 1 is a general view showing the application of the vapor lock suppressor device to an internal combustion engine of a motor vehicle.

FIG. 2 is an enlarged front elevation of the vapor lock suppressor.

FIG. 3 is an enlarged side elevation of the vapor lock suppressor.

FIG. 4 is an enlarged section on the line 4—4 of FIG. 2.

As an example of one embodiment of this invention, there is shown in FIG. 1 a typical installation of the device in connection with an internal combustion engine 10 of a motor vehicle having the usual fuel pump 11, carburetor 12, radiator 13 and cooling fan 14, and the gasoline tank 15. A supply gasoline line 16 is interconnected between the gasoline tank 15 and the fuel pump 11. A discharge gasoline line 17 from the fuel pump is connected to the carburetor 12.

In order to prevent the gasoline lines 16 and 17 from becoming overheated causing vapor lock in the carburetor 12 there is provided a vapor lock suppressor device comprising a mounting shank 18 having in one end a keyhole-shaped slot 19 having outwardly divergent sides 20 and 21 terminating in a cylindrical bore 22 adapted to fit the outside diameter of the gasoline line.

Rigidly fixed to the other end 23 of the shank 18 is

the air scoop 24 having a concave forward surface 25 and upturned side deflectors 26 and 27 which convergently extend toward the shank 18 so as to form a venturi-like passageway 28 to concentrate a strong flow of air from the end 23 of the shank 18 onto the gasoline line 16–17 to effectively cool the lines by deflecting the air flow 29 from the fan 14 and forward movement of the vehicle.

While the apparatus herein disclosed and described constitutes a preferred form of the invention, it is also to be understood that the apparatus is capable of mechanical alteration without departing from the spirit of the invention and that such mechanical arrangement and commercial adaptation as fall within the scope of the appendent claims are intended to be included herein.

Having thus fully set forth and described this invention what is claimed and desired to be obtained by United States Letters Patent is:

A vapor lock suppressor comprising in combination:

A. an existing gasoline pipe line,

B. a mounting shank,

C. a keyhole-shaped slot formed in said shank including,

D. a cylindrical gasoline pipe line receiving bore surface adapted to fit the outside diameter surface of said gasoline pipe line,

E. and divergent side surfaces extending radially outwardly from said gasoline pipe line receiving bore to one end of said shank,

F. an air scoop fixed to the other end of said shank and extending radially outwardly from said gasoline pipe line receiving bore including,

G. a concave forwardly facing surface facing into the air stream flowing over said gasoline pipe line,

H. and integral forwardly extending side deflectors formed on said concave surface extending convergently radially inwardly toward said gasoline pipe line receiving bore of said shank to form a venturi-like passageway to concentrate a strong flow of air from the outer end of said air scoop toward said shank and over said gasoline pipe line.

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