United States Patent [19]

Rima

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[54] PORTABLE ANTENNA MOUNT FOR TRUCKS

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[52] **U.S. Cl.** **343/715,** 343/720, 343/881

[51] **Int. Cl.**.....**H01q 1/32**

[58] **Field of Search**.....343/711, 712, 713, 715, 880, 343/882, 720, 881

[56] **References Cited**

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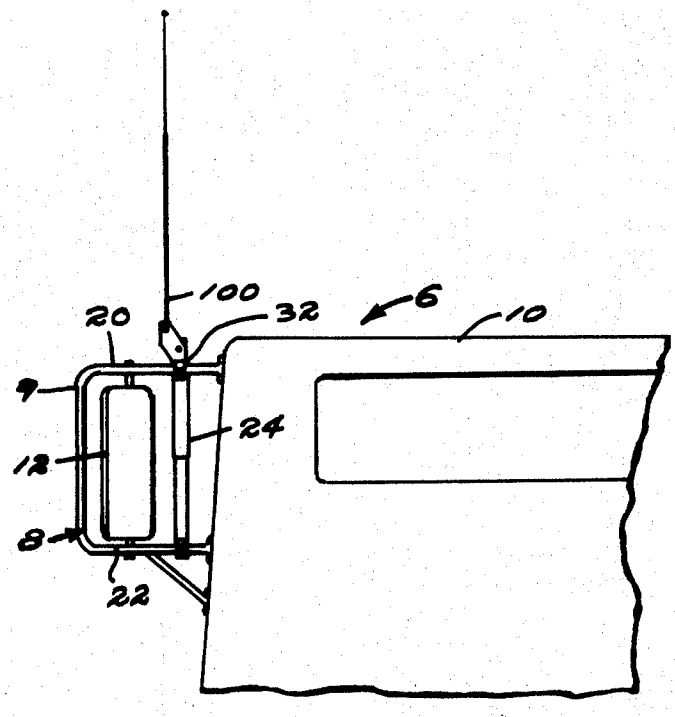
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[57] **ABSTRACT**

An antenna mount for removably attaching a radio antenna to the bracket of a side-mounted mirror of a truck, the mount comprising telescoping upper and lower tubular members having a spring therein, means attaching hooks to each member so that said spring causes said hooks to clamp against outwardly extending portions of said mirror bracket, an antenna of a vertically telescoping type folding into a collapsed position with respect to the telescoping tubes for compact storage.

The combination described in further combination with a truck and truck mirror having outwardly extending bracket portions.

9 Claims, 3 Drawing Figures



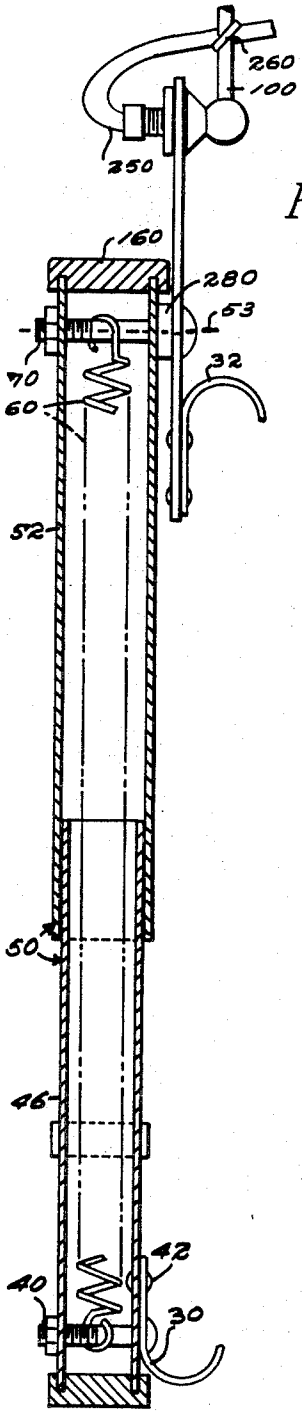


FIG. 1.

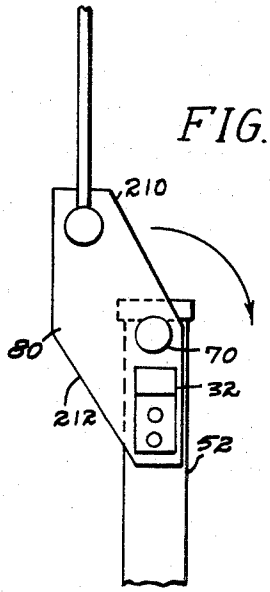


FIG. 2.

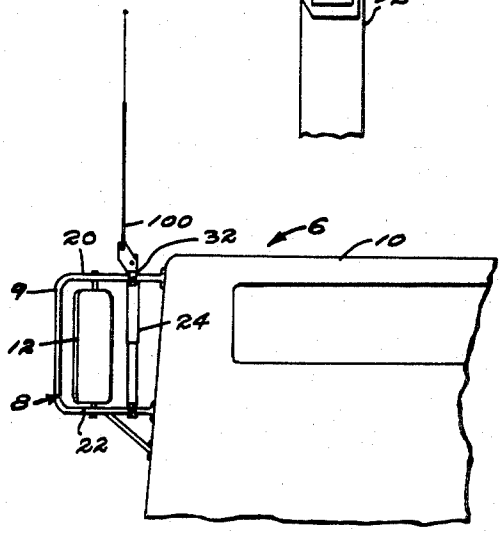


FIG. 3.

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PORTABLE ANTENNA MOUNT FOR TRUCKS

FIELD OF THE INVENTION

This invention is in the field of truck radio antenna mountings.

DESCRIPTION OF THE PRIOR ART

Many trucking companies do not furnish radios with their trucks. A radio is rather vital as a matter of highway safety because it tends to keep a trucker awake.

It has become common for truckers to bring their own radios and their own radio antennas, transferring the radios and antennas to each new truck to which they are assigned, and inbetween assignments taking the radio and antenna home with them.

Some truckers have attached antennas to their outside mirror bracket with vise-grip pliers, but this has two disadvantages. One disadvantage is that the tubular mirror bracket becomes crushed and unsightly and weakened from being flattened out. Another disadvantage is that it is a nuisance for the operator to attach the antenna with pliers in this manner because the upper side of the truck mirror bracket is too high to reach while the trucker is standing on the ground.

The only removable attachments for attaching antennas to automotive vehicles in the prior art are devices for attaching antennas to rain guttering of automobiles. But most rain gutters are very shallow and do not form a strong support for antenna-attachment means and are, therefore, unsuitable for mounting a whipping antenna, swinging in the air in a high wind over trucks going at highway speeds.

SUMMARY OF THE INVENTION

An antenna mount for removably attaching a radio antenna to the bracket of a side-mounted mirror of a truck, the mount comprising telescoping upper and lower tubular members having a spring therein, means attaching hooks to each member so that said spring causes said hooks to clamp against outwardly extending portions of said mirror bracket, an antenna of a vertically telescoping type folding into a collapsed position with respect to the telescoping tubes for compact storage.

The combination described in further combination with a truck and truck mirror having outwardly extending bracket portions.

The antenna being attached by a support member pivotally mounted on the upper telescoping tube and the support member having a hook mounted on it so that the pressure of the mirror bracket against the upper hook tends to hold the support member firmly in position for maintaining the elongated antenna erect.

The support member being attached to the antenna at a point horizontally offset from the axis of pivoting of the support member so that the antenna attachment means does not strike the upper tube and interfere with folding, but rather permits compact folding.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a rear elevation of the upper left-hand corner of the cab portion of a truck shown with the radio antenna supported on the outside mirror bracket thereof by the mount of this invention.

FIG. 2 is a side elevation of the aerial and antenna mount of this invention as the latter would be seen looking at it from the left-hand side of FIG. 1, the closer half portions of telescoping tubes and caps being broken away and the remainder showing in section, a portion of a spring being diagrammatically shown in dotted lines, the upper portion of the antenna being broken away and a portion of the lead-in wire being broken away.

FIG. 3 is a view of the upper portion of the antenna mount as it would be seen from the rearward side without the mirror bracket and upper portion of the antenna being shown and the lead-in cord being omitted.

DESCRIPTION OF THE PREFERRED EMBODIMENT

In FIG. 1 a truck, mirror, and antenna bracket assembly is shown generally indicated at **6** having as one of its parts an outside mirror antenna bracket assembly indicated at **8** having a mirror bracket **9** attached to a truck **10** and supporting the outside mirror **12**.

The bracket **9** has two approximately horizontal upper and lower bracket portions **20** and **22** which also can be called outwardly extending bracket portions **20** and **22**, since they extend outwardly from the side of the truck **10**.

The antenna mount of this invention is generally indicated at **24** and has a lower upwardly opening hook **30** and an upper downwardly opening hook **32**.

The lower hook **30** is directly attached by a bolt **40** and rivet **42** to a telescoping hollow tubular lower portion or slidably interconnected member or tube **46** of a tubular telescoping assembly generally indicated at **50**.

The lower inner tube **46** telescopes in an upper outer tube slidably interconnected member **52**.

An elongated tension spring **60** extending through the tubes **46** and **52** is attached to the bolt **40** at its lower end and to a bolt **70** at its upper end for pulling the tube assembly **50** into shorter size for continually pressing the hooks **30** and **32** against the mirror brackets **20** to hold this antenna bracket of this invention thereto.

Referring now to FIG. 1 again, at its upper end is an antenna support plate **80** pivotally attached by the bolt **70** to the upper tube **52** for rotation about a horizontal axis **53**. The plate **80** has the antenna **100** attached to it and it will be seen that when the trucker desires to remove the antenna bracket, he simply stretches the tubes **46** and **52** apart slipping the hook **32** off of the upper bracket **20**, disconnects the antenna lead-in wire on his radio, swings the plate **80** in the direction of the arrow **81** until the antenna is in folded position parallel to the tubes **46** and **52**, and takes the antenna with him to put on the next truck which is assigned to him.

The upper end of the tube **52** has a cap **160** closing it from the weather and lower end of the lower tube **46** has a cap **162** for the same purpose and to protect a user from the sharp edges of the tube.

In FIG. 3, it will be seen that one of the upper edges of the support plate **80** and shown at **210** is slanted at an angle with respect to the vertical and horizontal as also is one of the lower edges of the plate **80** as seen at **212** for purposes of making the bracket **80** of lesser wind resistance, although it is originally cut from rectangular material.

The antenna lead-in cord **250** is attached to the antenna **100** by an attachment means **254**, which latter is attached to the plate **80** through a hole therein. The cord **250** is suitably fixed to the antenna **100** by means shown at **260** and the remainder of the cord **250**, not shown, extends into the cab of the truck by extending around a side of the door.

A rubber washer **280** surrounds the bolt **70** between the plate **80** and the upper tube **52** to seal rain out of the upper tube.

I claim:

1. In combination: a truck having a mirror on its outer side, a bracket supporting said mirror, said bracket having upper and lower bracket portions extending outwardly from said side of said truck, a portable antenna mount for trucks comprising upper and lower slidably interconnected members slidable with respect to each other in a vertical direction, said upper interconnected member being generally above and lapping the lower one of said interconnected members, a lower hook means attached to the lower slidably interconnected member and extending outwardly from a side thereof, an antenna support member, means attaching said support member to one of said slidably interconnected members, an upper hook means disposed above said first-mentioned hook, and means attaching said upper hook means to an upper portion of said mount, said lower hook means receiving therein the lower one of said outwardly extending bracket portions, and said upper hook means being disposed receiving therein the upper one of said outwardly extending bracket portions, spring means, means attaching said spring means to said slidably interconnected members in a manner for causing said spring means to urge said interconnected members in a direction parallel to a line between said upper and lower hook means and such that said hook means each press against their respective outwardly extending bracket portion in a manner for maintaining said bracket portions in said hook means respectively for firmly attaching said mount on said bracket, and an antenna attached to said antenna support member and extending upwardly therefrom.

2. The combination of claim **1** in which said antenna support member is pivotally attached to the upper one of said slidably interconnected members in a manner for pivoting about an axis transverse to a line extending between said hooks whereby said antenna mount, when removed from said mirror bracket, can be collapsed so as to be easily portable by pivoting said support member so that said antenna is in alignment with a line between said hook means.

3. The combination of claim **2** in which said upper hook means is attached to said antenna support member.

4. The combination of claim **3** in which said upper hook means is disposed below said pivot axis.

5. The combination of claim **2** in which said antenna is attached to said antenna support member by means extending into a plane disposed at a right angle to said pivot axis, which plane is in intersection with the upper one of said slidably interconnected members, the place of attachment of the lower portion of said antenna to said support member being offset horizontally from said pivot axis at times when said antenna mount is in position on said mirror bracket whereby said antenna support member can be pivoted into a position for placing said elongated antenna in parallelism with a line extending between said upper and lower hook means without interference from the said extending portion of said antenna attachment means.

6. The combination of claim **1** in which said slidably interconnected members comprise two tubes, said spring means being disposed inside said tubes.

7. The combination of claim **6** in which said upper tube is on the outside of the lower tube to prevent water from raining into space between said tubes.

8. The combination of claim **6** in which cap means are disposed over the top of said upper tube and over the bottom of said lower tube.

9. The combination of claim **6** in which a shoulder means is disposed on the inner one of said tubes in a position so as to be engaged by the adjacent end of the upper one of said tubes to prevent excessive collapse of said two slidably interconnected members beyond the combined length sufficient so as to be as long as the minimum length of said antenna, said antenna being a telescoping antenna having a minimum length when it is collapsed.

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