



# Windshield Clean Systems

## Windshield washing system for all automobiles

Windshield clean “Touch-N-Clean” system for all vehicles EV and ICE. The system includes an apparatus that integrates with a motor vehicle for washing the front windshield of a vehicle. The Windshield Clean “Touch-N-Clean” System is operated via the navigation screen in the vehicle or from an application on a smart phone that is connected via Bluetooth to the vehicle.



The Windshield Clean “Touch-N-Clean” System employs cleaning heads that encompass the complete surface area of the windshield, to clean the entire surface. It may also be operated to spot clean a localized area of the surface, as needed. The cleaning head of The Windshield Clean “Touch-N-Clean” System may be operated with one or two extension members, oscillate about articulating joints or a gantry system in which a horizontal component rides within tracks up and down the windshield. The cleaning head traverses left and right or up and down on the mechanical member encompassing the entire windshield exterior surface.

## ABSTRACT OF THE INVENTION

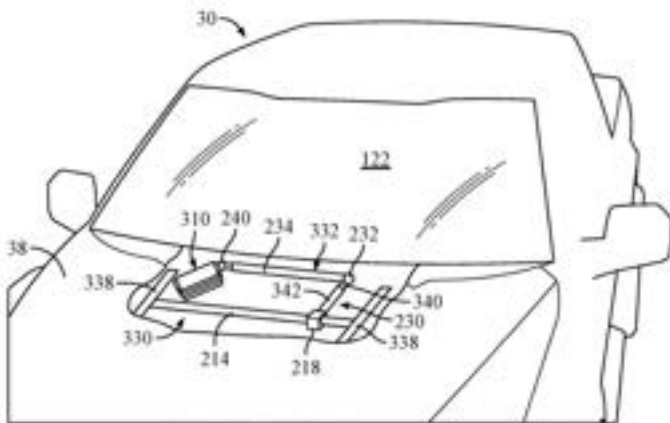
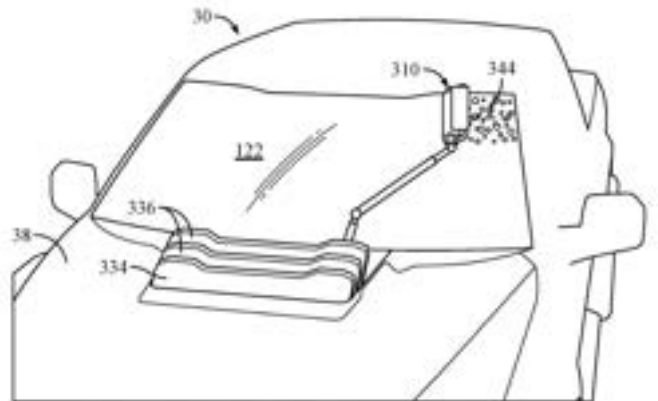
The cleaning mechanism for a surface, such as a windshield of a vehicle, has a housing that holds a spray bar, rotatable brush and a wiper squeegee blade. An engagement mechanism moves spray bar, the brush, and the wiper blade out from a disengaged position within the housing to an engaged position outside the housing so that they can be used to clean, brush, and dry the surface. After the spray bar, brush, and wiper blade are used to, respectively, clean, brush, and dry the surface, the engagement mechanism then moves the spray bar, the brush, and the wiper blade to a disengaged position within the housing.



To view animations login to: [www.windshieldclean.com](http://www.windshieldclean.com)



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United States Patent  
Singer

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Date of Patent: Jul. 24, 2018

**WINDSHIELD TOUCH AND CLEAN SYSTEM**

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Subject matter classification: The term of this patent is extended or adjusted under 35 U.S.C. 156(a) by 9 days.

App. No. 15/912,881

Filed: Mar. 14, 2018

**Related U.S. Application Data**

Continuation in part of application No. 14/762,764, filed on Oct. 22, 2017, now Pat. No. 9,890,118, which is a continuation-in-part of application No. 13,433,243, filed on Feb. 23, 2017, now Pat. No. 9,811,432, which is a continuation of application No. 12/671,041.

Int. Cl. (IPC): B60J 1/00 (2006.01), B60J 1/08 (2006.01), B60J 1/34 (2006.01), B60J 1/36 (2006.01), B60J 1/06 (2006.01)

U.S. Cl. (CPC): B60J 1/00 (2013.01), B60J 1/08 (2013.01), B60J 1/34 (2013.01), B60J 1/36 (2013.01), B60J 1/06 (2013.01), B60J 1/34 (2013.01), B60J 1/36 (2013.01)

Field of Classification Search: B60J 1/00, B60J 1/08, B60J 1/34, B60J 1/36, B60J 1/06, B60J 1/34, B60J 1/36, B60J 1/06, B60J 1/34, B60J 1/36, B60J 1/06, B60J 1/34, B60J 1/36

See application file for complete search history.

**References Cited**

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**ABSTRACT**

A cleaning device for a vehicle has tracks above and below the vehicle's windshield. A brush, wiper blade and spray bar extend across the windshield at a starting side of the windshield. The spray bar provides water that is the brush across against the windshield. The spray bar, rotating brush and wiper bar are moved along the tracks and across the windshield in an opposing, inner side of the windshield where the wiper blade first contacts the windshield and the brush, wiper blade and spray bar are moved away from the windshield. The spray bar rotates and the wiper blade to flow air against the windshield. The wiper blade scrapes water while air blows water off the windshield as they move back to the starting side of the windshield where they are moved to a frame along the side of the windshield where not in use.

5 Claims, 50 Drawing Sheets

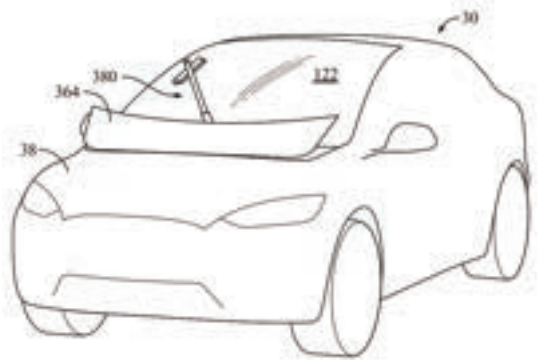


FIG. 59

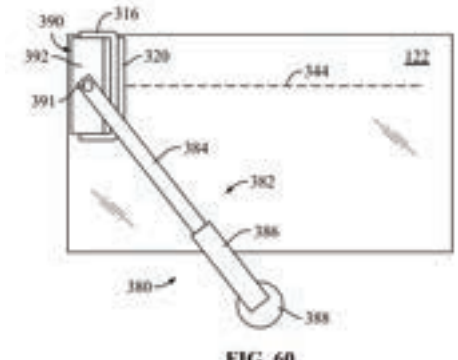


FIG. 60

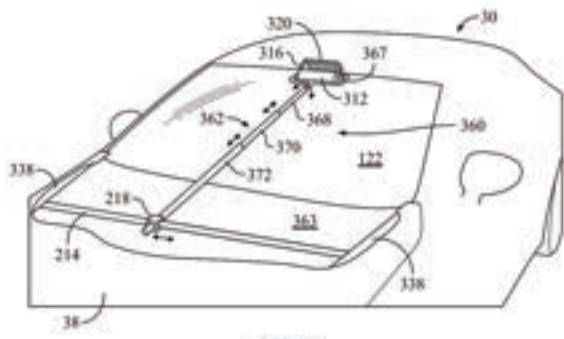


FIG. 57

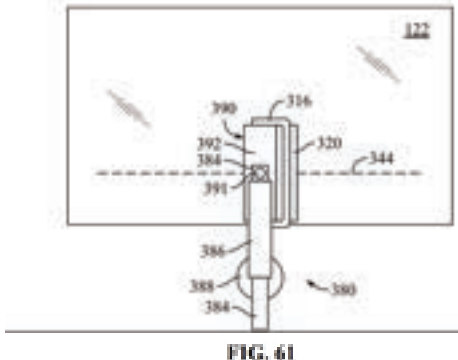


FIG. 61

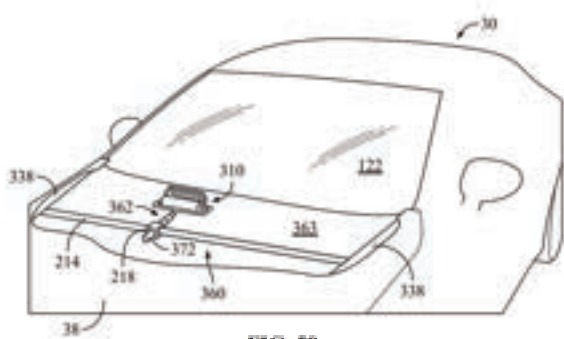


FIG. 58

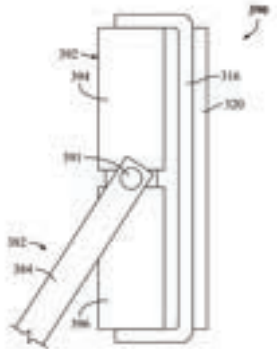


FIG. 62