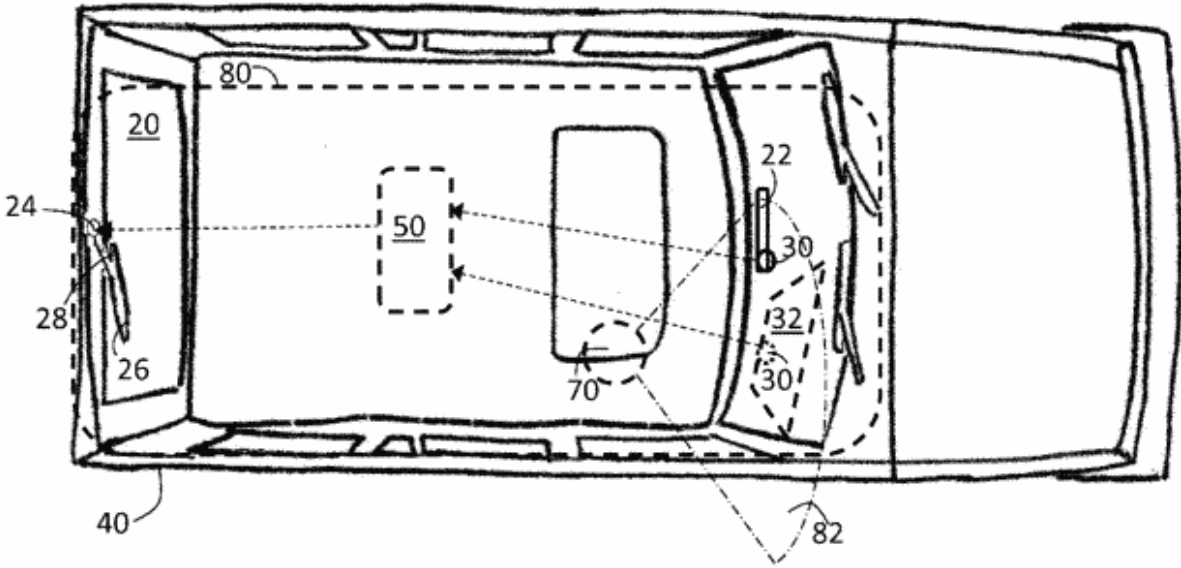


Jaguar Land Rover has sights on eye-tracking wiper

May 5 2015, by Nancy Owano



Credit: Windscreen Clearing System for a Vehicle, US 20150066293 A1

An eye-tracking wiper is a vision that has developed into a patent. The patent applicant is Jaguar Land Rover. This would be an eye-tracking system not to catch drivers dozing off but to help enhance safety via helping to operate the rear-screen wiper.

The [patent](#) is titled "Windscreen Clearing System for a Vehicle," which

describes how the eye-tracking hardware and software would be put to work. In brief, you, the driver, look in your [rear-view mirror](#) and the wipers on the rear window become activated. Eye-tracking tech was in focus with an earlier January announcement of a Jaguar Land Rover tie-in with Intel (chips to power technology) and Seeing Machines (in the business of computer vision-related technologies that help machines understand people by tracking and interpreting [human](#) faces and eyes). The concept involved preventing risks of a drowsy driver via [eye-tracking technology](#). This was described as sensing technology that could monitor the face and eyes to reduce distracted and drowsy driving.

The latest move indicates another application. Ben Purvis wrote about it on Tuesday in *Gizmag*. Purvis thought it as an illustration of "how eye-tracking technology could seamlessly improve the driving experience, subtly working behind the scenes."

Purvis recognized the usefulness of what the patent proposed, saying "rear wipers have some essential problems. On wet roads or in rain, constant wiping is rarely necessary but intermittent sweeps are often mistimed, so at the instant you glance in the mirror there's a good chance the view through the back screen will be obscured. Cue the eye-tracking [tech](#)." Similarly, Nick Cowen in *Gizmodo UK* wrote, "if you've set your rear window's wiper to [clear](#) the window of rain water at intervals, rather than at a constant pace, there's a good chance when you check your rearview, your vision could be obscured."



The patent itself worded the reason for coming up with this solution as such:

"A problem that is encountered with current rear wiper systems is that, when a driver decides to observe the environment behind the vehicle by looking through the rear windscreen, (typically using a rear-view mirror), the rear windscreen may not be wiped and may be obscured despite the rear windscreen wiper having been switched on normally by the driver. This is because the timing of the driver looking through the rear-windscreen may be in between wipes of the rear windscreen the two being entirely independent of each other. This can be disadvantageous and often leads to the driver manually adjusting the wiper control switch on the control stalk to initiate a single wipe. Whilst the driver then knows that the rear windscreen has just been cleared and the driver can then observe the environment behind the vehicle, a delay has been incurred which may be disadvantageous."

The patent described other distractions. One is that the driver may look

down in order to operate the control switch. Looking down may just be a momentary action, but it's preferable if looking down could be avoided. "This is especially so in rainy conditions where screen wipers are required," according to the patent. "Furthermore, the driver may have to repeatedly make the effort to 'manually' cause the wipers to clear the rear windscreen as the vehicle is driven in rainy conditions."

As part of the technology proposed, there would be "one or more tracking sensors," which may comprise a camera, infra-red sensor and/or another optical sensor.

More information: Patent: [Windscreen Clearing System for a Vehicle](#)

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