

## Four Engineers Share Walter P. Chrysler Technology Award for Jeep Innovation

February 26, 2014, Auburn Hills, Mich. - This year's Walter P. Chrysler Technology Award goes to four engineers whose patented innovation inspired the breakthrough four-wheel-drive system featured on the all-new 2014 Jeep Cherokee.

Don Schmanski, Mike Nemeth, Joe Kubina and Pete Jarzyna hold U.S. Patent No. 8172712, which covers the power transfer unit and associated components that contribute to no-compromise 4WD performance in a vehicle with a transverse engine and front-wheel-drive architecture. The innovation was among 44 patented technologies considered for the prestigious award honoring Walter P. Chrysler, whose creative vision pioneered the Company.

"This PTU technology exemplifies true problem solving creativity that is a hallmark of Chrysler Group engineering," says Ed Smith, Assistant General Counsel-Intellectual Property. "It mitigates the vehicle-efficiency penalty historically associated with on-demand 4WD without diminishing 4WD capability, a feature that is fundamental to the Jeep brand and critical to so many customers. This invention allowed Chrysler to offer a 4WD package that achieves optimal functionality and efficiency."

The patent describes a reduction hub controlled by a range selector with high, low and neutral settings. It is used to engage a planetary gear assembly that drives a transaxle's output shaft.

The resulting technology enables the 2014 Jeep Cherokee to boast crawl ratios up to 56:1, while also contributing to a 2.5% fuel-economy improvement, compared with conventional on-demand systems.

Judging for the annual Walter P. Chrysler Technology Award – first bestowed in 1994 – is performed by a panel of more than 40 Chrysler Group subject experts, along with previous award winners. The panel reviews every Chrysler Group patent approved during the previous year and identifies a group of finalists, from which senior management selects a winner.

Schmanski, an engine systems engineer who joined the Company in 1998, also was among the runners-up. Along with Brian Beechie, Daniel Brown, Donald Hughes, Charles Bienenstein, Mark Azzaretti and the late James Savage, Schmanski co-holds U.S. Patent No. 8095287 – a method and system that accommodates the distinctive function of Chrysler Group's all-wheel-drive system for rear-wheel-drive cars.

Featuring a segment-exclusive transfer case and front-axle-disconnect capability, the system continuously monitors driving conditions and accordingly locks or unlocks the disconnect mechanism – seamlessly and without driver intervention. This boosts efficiency by limiting all-wheel-drive activation to situations when it would most benefit the driver.

Also among this year's four finalists:

- Ron Kaip, Dave Bargiel and Steve Swailes for U.S. Patent No. 8182016, a seat assembly that is easily manipulated to accommodate a forward-facing position or one that faces the rear
- Jerald P. Roach, Jeffery L. Geill, David F. Hirschmann, Richard Kleinhoffer, Richard Holland Jr. and Claude Bou-Waked for U.S. Patent No. 8096044, an apparatus for setting the door and quarter-glass in a convertible vehicle body, prior to the assembly of the convertible top

Chrysler Group gives an honorarium to all employees whose patents are approved by the U.S. Patent Office. They also receive a commemorative plaque from the company.

Winners of the Walter P. Chrysler Technology Award receive a commemorative medallion and have ribbons affixed to

their plaques. Their names also are etched on a trophy displayed at Chrysler Group headquarters.

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