

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

**BAYERISCHE MOTOREN WERKE AKTIENGESELLSCHAFT & BMW  
OF NORTH AMERICA, LLC,**  
Petitioners

v.

**PAICE LLC & THE ABELL FOUNDATION, INC.**  
Patent Owners

---

*Inter Partes* Review No.: IPR2020-01386

U.S. Patent No. 7,237,634 K2

---

**PETITIONERS' RESPONSE IDENTIFYING ISSUES RAISED IN THE  
PATENT OWNER RESPONSE OR THE INSTITUTION DECISION TO  
WHICH THE EVIDENCE AND/OR ARGUMENTS IDENTIFIED BY  
PATENT OWNERS RESPONDS**

**I. Graf (Grounds 3, 4-9)**

Section IV of BMW's Reply, Ex. 1090, and Dr. Davis's reply declaration (BMW1088) at ¶¶99-103 directly rebut and respond to PO's arguments that: **(i)** Graf "merely discloses a block (2) that calculates the 'driving style of the driver'" as "a choice between 'emissions' or 'performance;'" **(ii)** Graf's disclosure is a "black box" with "no evidence that Graf 'monitors[s] a driver's repeated driving operations over time;'" **(iii)** "[t]he examples provided in Graf speak to whether someone prefers a sports car to an economy car; **(iv)** "rather than provide a mechanism to monitor these preferences, Graf simply assumes that the driver has expressed a choice;" and **(v)** "[n]one of Graf's disclosures suggest that there is any pattern at issue, or that it is being monitored." POR at 52-54 & n.22. They also directly respond to the issue raised in the ID of whether Graf's "characterizing the driver style of the driver" requires "*monitoring a driver's repeated driving operations over time.*" ID at 46.

Dr. Davis originally opined what a POSA would understand about Graf—citing to Graf's disclosure that incorporates Exhibit 1090. *See* Ex. 1008 at ¶¶201, 301 (citing BMW1020, 5:36-42). BMW's Petition relied on this portion of Graf and its reference to Ex. 1090 as well. *See* Pet. at 30-32 (citing BMW1020, 5:36-42). The inclusion of Exhibit 1090 and related arguments and opinions in reply are in direct rebuttal to the POR arguments listed in **(i)** through **(v)** above and in direct response to the issues raised in the ID indicated above.

## II. Severinsky (Grounds 1-9)

PO did not previously object with any specificity or request the Board's permission to file a motion to strike on these Grounds, arguments, or evidence.

Pages 10-11 of BMW's Reply and Dr. Davis's reply declaration (BMW1088) at ¶¶8-26 directly rebut and respond to (i) the POR argument that Severinsky's hysteresis is only speed-based while the "setpoint" claimed in the '634 Patent is "a *torque* value;" and (ii) the POR's acknowledgement of a "physical relationship between speed and torque," but argument that it "does not bridge the chasm between Severinsky's separate speed and torque-based algorithms." POR at 18-23.

BMW's reply argument and evidence (i) confirms PO's admission of a "physical relationship between torque and speed" because "Severinsky's so-called 'speed-based hysteresis' must take torque into account," and (ii) responds that while "[o]ther, secondary parameters can also be taken into account, [] the road load request of the operator is paramount," with various examples of that concept being known in the art, including from Exhibits 1015, 1091, and 1092. *E.g.*, Ex. 1088, ¶¶12-13, et seq.; Reply at 10-11.

Regarding PO's complaints about Exhibits 1015 and 1092, Exhibit 1015 is Bumby II, which has been part of the record since the Petition. Exhibit 1092 contains omitted excerpts from a 2005 textbook that PO submitted with its POR as Exhibit 2020, which undercut PO's and Shahbakhti's reliance on Exhibit 2020.

Respectfully submitted,

Dated: August 24, 2021

/Vincent J. Galluzzo/  
Jeffrey D. Sanok (Reg. No. 32,169)  
Vincent J. Galluzzo (Reg. No. 67,830)  
Crowell & Moring LLP  
1001 Pennsylvania Avenue NW  
Washington, DC 20004-2595  
Tel.: (202) 624-2500  
Fax.: (202) 628-8844  
jsanok@crowell.com  
vgalluzzo@crowell.com

Scott L. Bittman (Reg. No. 55,007)  
Jacob Z. Zambrzycki (*pro hac vice*)  
Crowell & Moring LLP  
590 Madison Avenue, 20th Floor  
New York, NY 10022-2544  
Telephone No.: (212) 223-4000  
Facsimile No.: (212) 223-4134  
sbittman@crowell.com  
jzambrzycki@crowell.com

*Counsel for Petitioners*  
*Bayerische Motoren Werke*  
*Aktiengesellschaft and BMW of North*  
*America, LLC*

**Certificate of Service**

Pursuant to 37 C.F.R. § 42.6(e)(4), I certify that the foregoing Petitioners' PETITIONERS' RESPONSE IDENTIFYING ISSUES RAISED IN THE PATENT OWNER RESPONSE OR THE INSTITUTION DECISION TO WHICH THE EVIDENCE AND/OR ARGUMENTS IDENTIFIED BY PATENT OWNERS RESPONDS was served on August 24, 2021 via electronic mail on the following counsel of record for Patent Owners:

Ruffin B. Cordell  
Indranil Mukerji  
Brian J. Livedalen  
Timothy W. Riffe  
FISH & RICHARDSON P.C.  
3200 RBC Plaza  
60 South Sixth Street  
IPR36351-0018IP1@fr.com  
PTABInbound@fr.com

Respectfully submitted,

Dated: August 24, 2021

/Vincent J. Galluzzo/  
Vincent J. Galluzzo