

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

ROBERT BOSCH LLC,)	
)	
Plaintiff,)	
)	
v.)	C.A. No. 12-574 (LPS)(CJB)
)	(CONSOLIDATED)
ALBEREE PRODUCTS, INC., API KOREA)	
CO., LTD., SAVER AUTOMOTIVE)	
PRODUCTS, INC., and COSTCO)	
WHOLESALE CORPORATION,)	
)	
Defendants.)	

DECLARATION OF DR. STEVEN DUBOWSKY

I, Steven Dubowsky, declare as follows:

1. I am Professor Emeritus in the Department of Mechanical Engineering and in the Department of Aeronautics and Astronautics at the Massachusetts Institute of Technology.

2. I submit this declaration in connection with Robert Bosch LLC's opening claim-construction brief. I have personal knowledge of the matters stated herein and would be competent to testify to them if required.

3. In providing my opinions I have considered the patent-in-suit discussed below as it would be understood by one of ordinary skill in the art. In my opinion, one of ordinary skill in the art has either an undergraduate degree in mechanical engineering or a similar discipline, or several years of experience in the field of wiper blade manufacture and design.

Construction of the Terms of U.S. Patent No. 6,836,926

4. I understand that the term " I_{zz} is a moment of inertia of a cross sectional profile around a z-axis perpendicular to an axis, which adapts along with the support element (12), and perpendicular to a y-axis" is a disputed phrase of the '926 patent.

5. I understand that Bosch's position is that the phrase should be construed as " I_{zz} is a moment of inertia of a cross sectional profile around a z-axis perpendicular to an s-axis which adapts along with the support element, and perpendicular to a y-axis, calculated by the formula

$I_{zz} = \frac{d * b^3}{12}$." I understand that defendants' position is as follows: "'Izz' denotes a moment of

inertia around a z-axis, the z-axis in this instance being the axis denoted 'z' in Figures 4, 5, and 7 of the '926 patent. The z-axis is perpendicular to an s-axis which adapts along with the support element (12), and perpendicular to a y-axis, the y-axis in this instance being the axis denoted 'y' in Figures 4, 5, and 7 of the '926 patent."

6. I understand that the term "taxis" is a typographical error, which defendants and Bosch agree refers to the s-axis.

7. It is my opinion that one of ordinary skill in the art at the time of the invention would refer to the formula disclosed in the patent specification (*see* '926 patent at 6:58–7:1) to calculate I_{zz} .

8. The specification states that to achieve the advantages of the invention, the wiper blade should be made so that it does not exceed a particular lateral deflection angle, that is, a certain angle in the direction of the wiper motion ('926 patent at 2:7–10; 6:45–58).

9. In order to avoid exceeding this angle, a specific moment of inertia, which is a way of describing the stiffness of the wiper blade in the lateral direction (in the plane of the window), is deemed I_{zz} and is calculated as described in the specification. ('926 patent at 6:58–7:1). There, the patent sets forth the formula for calculating I_{zz} for a beam with a substantially rectangular cross-section and substantially constant thickness and width as follows: $I_{zz} = \frac{d * b^3}{12}$.

10. In my opinion, one of skill in the art would understand that the patent is related to the lateral deflection angle of a beam, and would refer to the equation described above to calculate the corresponding moment of inertia. Indeed, the claim's recitation to the terms d and b as the thickness and width, respectively, of the support element confirms my understanding. It is my opinion that one of skill in the art would not need to refer to axes' position on Figures 4, 5, and 7, to calculate I_{zz} .

11. It is therefore my opinion that the disputed limitation should be construed as proposed by Bosch.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on: April 22, 2015



Steven Dubowsky, Sc.D.