

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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Shenzhen Silver Star Intelligent Technology Co. Ltd.

v.

iRobot Corporation  
Patent Owner

U.S. Patent No. 6,809,490  
Filing Date: June 12, 2002  
Issue Date: October 26, 2004

Title: Method and System for Multi-Mode Coverage for an Autonomous Robot

**DECLARATION OF MINGSHAO ZHANG**

*Inter Partes* Review No. <To Be Assigned>

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**I, Mingshao Zhang, declare as follows:**

1. I have been asked to provide a declaration regarding certain aspects of U.S. Patent No. 6,809,490 (“the ‘490 Patent”) addressed below, which I understand is the subject of the present *inter partes* review proceeding.

**I. BACKGROUND AND EXPERIENCE**

2. I am over the age of 18 and am competent to offer this Declaration. I have personal knowledge, or have developed knowledge of these technologies based upon education, training, or experience, of the matters set forth herein.

**A. General Work Experience and Professional Background**

3. I currently act as an assistant professor at Southern Illinois University Edwardsville. I have a very broad and deep understanding of robotics technologies as it relates to design, mechanisms, sensing, control as well as electronics and software systems utilized in mobile robots. I have taught many undergraduate classes including Engineering Problem Solving and Sensors and Actuators. As such I am very well versed with complete system design and with all their components such as motors, drivetrains, power-systems, user-interfaces, wireless communication systems, sensors, controls (hardware and software), electronics and microprocessors, and have an appreciation of the history of development in the field of robotics since its nascent years. All this experience is covered in my curriculum

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