

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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DYNACRAFT BSC, INC.,  
Petitioner,

v.

MATTEL, INC.,  
Patent Owner.

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Case IPR2018-00042  
Patent 7,621,543

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**DECLARATION OF ROBERT A. MALLOY**

Dynacraft BSC, Inc.

**Exhibit 1008**

Dynacraft BSC, Inc. v. Mattel, Inc.

IPR2018-00042

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The undersigned, Dr. Robert A. Malloy, resident at 46 Acorn Drive, Randolph, MA 02368, declares the following:

## **I. Scope of Work and Summary of Opinions**

1. I am an expert in the fields of engineering, plastics manufacturing, mold design, and molded part design.

2. I have been asked to provide my opinion concerning the patentability of claims 1, 5-8, and 10 in United States Patent No. 7,621,543 (“the ’543 patent”) (“the challenged claims”). As explained below, I have concluded that each of the challenged claims would have been obvious in view of the combination of U.S. Patent Publication No. 2005/0056474 (“Damon”), U.S. Patent No. 5,924,506 (“Perego”), and the Plastic Blow Molding Handbook (Norman Lee ed., 1990) (“Ground 1”), and the combination of Damon and U.S. Patent No. 3,910,332 (“Felker”) (“Ground 2”).

## **II. Qualifications**

3. My current curriculum vitae is being filed contemporaneously with this Declaration as Exhibit (“Ex.”) 1008.

4. I am a practicing Plastics Engineer, with an A.S. degree in General Engineering, a B.S. degree in Plastics Engineering and a Ph.D. in Polymer Science. I joined the faculty of the Francis School of Engineering at the University of

Massachusetts Lowell, Plastics Engineering Department in 1987. I served as Chair/Head of the Plastics Engineering Department at UMass Lowell for 14 years.

5. During my time at UMass Lowell, I have taught over 100 undergraduate, graduate, and industry courses (degree and non-degree) on engineering design, plastics processing, part and mold design, including those covering plastic molding, rubber molding, and the blow molding processes. I also have experience in the areas of mechanical design, machining, mold-making, and machine design. I have mentored and advised many M.S. and Ph.D. Plastics Engineering or Manufacturing Engineering degree candidates. I have also designed and managed the construction of many plastics molding and manufacturing laboratories at UMass Lowell including the *Rocheleau Blow Molding Laboratory*, which is equipped with injection, reciprocating screw, and extrusion blow molding machinery.

6. I am an active engineering consultant and have consulted with more than 50 companies in the area of plastic part design, mold design, or molding process design.

7. I am the author of over 100 publications, including a textbook on Plastic Part Design for the Injection Molding Process and co-author of other publications covering rubber molding and the blow molding process.

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