U.S. Patent No. 6,462,905 Declaration in Support of Patent Owner's Response in *Inter Partes* Review

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Sony Corporation
Petitioner
v.

Fujifilm Corporation
Patent Owner

Patent No. 6,462,905 Issue Date: October 8, 2002 Title: MAGNETIC TAPE CARTRIDGE

Inter Partes Review Nos. 2018-00876 and 2018-00877

DECLARATION OF WILLIAM VANDERHEYDEN IN SUPPORT OF PATENT OWNER'S RESPONSE IN INTER PARTES REVIEW

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TABLE OF CONTENTS

| I. | INTRODUCTION4 |
|----------------------------------|--|
| A. B. C. | Background |
| II. | UNDERSTANDING OF THE LAW8 |
| A. B. C. | Legal Standard for Anticipation8Legal Standard for Obviousness9Legal Standard for Claim Construction13 |
| III. | LEVEL OF SKILL OF ONE OF ORDINARY SKILL IN THE ART 18 |
| IV. | TECHNOLOGY BACKGROUND19 |
| V. | THE '905 PATENT28 |
| A. B. | Summary of the '905 Patent |
| VI. | CLAIM CONSTRUCTION35 |
| VII. | ANALYSIS OF THE PRIOR ART36 |
| A. B. C. D. E. F. | U.S. Patent No. 5, 901,916 ("McAllister-I") (Ex. 1005) |
| VIII. | · |
| | PR 2018-0087647 |
| A. | Claims 1 and 2 are novel and non-obvious over McAllister-I and Laverriere |
| a b B. C. | One of ordinary skill in the art would not have sought to combine McAllister-I and Laverriere |



| D. Claim 3 is novel and non-obvious over Mizutani | 81 |
|--|-----|
| a. Mizutani does not disclose the outer diameter of an engagement gear | |
| being larger than that of a braking gear | 81 |
| b. Mizutani does not disclose an engagement gear tooth on an engagement | |
| gear projectiongear organization | |
| | , , |
| IX. VALIDITY ANALYSIS OVER PRIOR ART REFERENCES CITED | |
| IN IPR 2018-00877 | 91 |
| A. Claim 1 is novel and non-obvious over Morita-I and Morita-II | 92 |
| a. A POSA would not have sought to combine Morita-I and Morita-II | 92 |
| b. The "guide surface" of Morita-I does not satisfy the "guide member" of | |
| claim 11 | |
| B. Claim 2 is novel and non-obvious over Morita-I, Morita-II, and Laverriere | |
| 1 | |
| a. One of ordinary skill would not have sought to combine Morita-I, Morita | a- |
| II, and Laverriere1 | |
| b. Projecting means of Laverriere are not "guide members" under | |
| Petitioner's proposed construction1 | 07 |
| C. Claim 3 is novel and non-obvious over Tsuyuki1 | |
| a. Tsuyuki fails to disclose or suggest that the outer diameter of the | |
| engagement gear is larger than that of the braking gear | 09 |
| | |
| X. RESERVATION OF RIGHTS1 | 17 |
| XI. APPENDIX1 | 18 |
| EXHIBIT 1: CURRICULUM VITAE OF WILLIAM VANDERHEYDEN.1 | 18 |
| | |
| 1 | 18 |
| EXHIBIT 2: MATERIALS CONSIDERED IN THE PREPARATION OF | |
| | 30 |



I. INTRODUCTION

- 1. My name is William Vanderheyden, I have over twenty-five years of experience in the design of tape cartridges and I am the founder of V1 Design & Manufacturing, a design to manufacturing engineering service. I have prepared the following declaration and analysis as an expert witness on behalf of FUJIFILM Corporation ("Fujifilm"). In this declaration, I provide my technical basis and analysis as to the validity of claims 1-3 of U.S. Patent No. 6,462,905 (the "'905 Patent").
- 2. I was retained as an expert witness in this matter and this declaration contains my expert opinions formed to date and the reasoning for those opinions. I may offer additional opinions based on further review of materials in this case, including opinions and/or testimony of other expert witnesses.
- 3. My relevant qualifications, including my educational background and career history is summarized below. My full curriculum vitae is attached as Exhibit 1 to this declaration.

A. Background

4. I have over twenty-five years of product development experience in data storage tape products. I obtained a Bachelor of Science in Mechanical Engineering from the University of Wisconsin–Madison in 1991.



- 5. After graduating from the University of Wisconsin–Madison, I worked as a Senior Development Engineer at 3M. In this role, I was involved in the development of components for data storage cartridges, including part design, analysis, prototyping, tool design and modeling. Around 1990, 3M reached an agreement with IBM to purchase the rights to the 3480-type cartridge technology. I was part of a technical team at 3M that was sent over to IBM to meet with the team that developed the 3480-type cartridge. In this role, I became familiar with the components of the 3480-type cartridge, and held meetings with various IBM employees who were instrumental with the initial design and development of the 3480-type cartridge.
- 6. Using this foundational knowledge of the 3480-type cartridge, I was able to work on the design of several future iterations of data storage tape products that were designed and developed at 3M. Such products include 3490, Timberline, SD-3, 3590, & QIC. On one particular project, I designed a hub for the Timberline data storage tape cartridge.
- 7. After 3M spun off its data storage business into Imation Corporation, I worked at Imation as a Product Development Specialist. As a Product Development Specialist, I was part of a laboratory team that focused on cartridge development. I was also involved in the design and analysis of tape



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