

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SONY CORPORATION  
Petitioner,

v.

FUJIFILM CORPORATION  
Patent Owner.

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Case No. IPR2018-00877  
U.S. Patent No. 6,462,905

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**REPLY DECLARATION OF THOMAS W. VON ALTEN**

SONY Exhibit 1033  
SONY v. FUJI

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I, Thomas von Alten, declare:

1. I have been retained by Wolf, Greenfield & Sacks, P.C., counsel for Petitioner Sony Corporation (“Petitioner” or “Sony”), to submit this reply declaration in connection with Sony’s Petition for *Inter Partes* Review of Claims 1-4 of U.S. Patent No. 6,462,905 (“the ’905 patent”).

2. I am being compensated for my time at a rate of \$250.00 per hour, plus actual expenses. My compensation is not dependent in any way upon the outcome of this proceeding.

3. My background is provided in my earlier declaration (Ex. 1004), and that declaration also contains my opinions concerning the patentability of claims 1-4 of the ’905 Patent. I understand that Fujifilm subsequently disclaimed claim 4.

4. In preparing this reply declaration, I was asked to evaluate and respond to certain opinions that Mr. William Vanderheyden provided in a statement (Ex. 2008) that Fujifilm submitted in this proceeding.

**I. GROUND 1: THE MCALLISTER-I AND LAVERRIERE COMBINATION RENDERS CLAIMS 1-2 OBVIOUS**

5. As set forth in my opening declaration, a person of ordinary skill in the art (“POSA”) would have had reasons to add the “centering ribs” of Laverriere to the cartridge depicted in McAllister-I. The resulting McAllister-I / Laverriere combination would have included every element of claims 1 and 2.

**A. McAllister-I Exhibits the Same Potential for Brake Misalignment that Motivated Laverriere’s Centering Ribs**

6. As explained in my opening declaration, Laverriere explains that centering ribs are helpful because clearances between a braking member and the components with respect to which it moves inside a tape cartridge create the potential for the braking member to become “misaligned...during assembly and/or use.” Ex. 1004 ¶158; Ex. 1007 at 1:31-39.

7. The same is true of McAllister-I. For example, as I previously explained, in McAllister-I there must be clearance between the outer circumference of the locking gear 42 (braking member) and the inner surface of the reel hub 32 to ensure undisturbed rotation of the reel as tape is wound or unwound. Ex. 1004 ¶161. Likewise, as I also previously explained, in McAllister-I there must be clearance between mating components 58 and 60 that attach the braking member to the top portion of the cartridge shell because these components move up and down relative to one another when the braking member moves up and down to unlock and lock the reel. Ex. 1004 ¶162; McAllister-I at Fig. 3.

8. Mr. Vanderheyden disagrees and states that “a person of ordinary skill in the art would not identify a misalignment problem in McAllister-I.” 2008 ¶130. Mr. Vanderheyden is incorrect.

## 1. A POSA Knew There Must Be Clearance Between McAllister-I's Locking Gear and Reel Hub

9. Mr. Vanderheyden states that “a POSA would not assume that clearance exists between elements, if such a clearance or spacing is not explicitly shown in the figures” of McAllister-I. Ex. 2008 ¶133. He then argues that there could be a “line-to-line” fit (i.e., no clearance at all) between McAllister-I’s locking gear 42 (braking member) and the inner surface of its reel hub 32. *Id.* This, of course, is impossible as I explained in my opening declaration, because the reel of such a cartridge rotates at speeds of more than 2,000 rpm and is expected to last for years. Were the locking gear 42 and the inner surface of the reel hub 32 in contact with each other, operation of the cartridge would be impossible. Indeed, in an earlier section of his declaration, Mr. Vanderheyden admitted that McAllister-I is designed to have clearance between these components: “The male and female interlocking structures were designed with a tight fit<sup>1</sup> *to prevent the braking member from touching the inner wall of the reel hub*, without obstructing the intended up and down movement of the braking member.” Ex. 2008 ¶69 (emphasis added).

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<sup>1</sup> I will address Mr. Vanderheyden’s incorrect analysis of the interlocking structures (i.e., mating elements 58 and 60) separately in the next section of this declaration.

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