UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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US ENDODONTICS, LLC,
Petitioner

v.

GOLD STANDARD INSTRUMENTS, LLC
Patent Owner

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Case: IPR2015-00632
U.S. Patent No. 8,727,773

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**DECLARATION OF A. JON GOLDBERG**



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## EXHIBIT LIST

| Exhibit # | Exhibit Description |
|---|---|
| 1001 | U.S. Patent No. 8,727,773 B2 (the "'773 patent") |
| 1002 | Declaration of A. Jon Goldberg |
| 1003 | Harmeet Walia et al., *An Initial Investigation of the Bending and Torsional Properties of Nitinol Root Canal Files*, 14 J. ENDODONTICS 346 (1988) ("Walia") |
| 1004 | Fujio Miura et al., *The super-elastic property of the Japanese NiTi alloy wire for use in orthodontics*, 90 AM. J. ORTHODONTICS & DENTOFACIAL ORTHOPEDICS 1 (1986) ("Miura") |
| 1005 | Satish B. Alapati, "An investigation of phase transformation mechanisms for nickel-titanium rotary endodontic instruments," PhD thesis, 2006. ("Alapati") |
| 1006 | Alan R. Pelton et al., Optimisation of Processing and Properties of Medical-Grade Nitinol Wire, 9 Minimally Invasive Therapies & Allied Techs. 107 (2000) ("Pelton"); |
| 1007 | U.S. Patent No. 5,697,906 to Ariola et al. |
| 1008 | Prosecution history of the '773 patent |
| 1009 | Prosecution history of U.S. Patent No. 8,062,033 |
| 1010 | Prosecution history of U.S. Patent No. 8,562,341 |
| 1011 | US. Provisional Patent Application No. 60/578,091 |
| 1012 | U.S. Patent Application Publication No. 2008/0032260 A1, Luebke ("Luebke 2008") |
| 1013 | Prosecution history of U.S. Patent No. 8,083,873 |
| 1014 | U.S. Patent Application Publication No. 2011/0271529 A1, Gao et al. ("Gao") |

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| 1015 | U.S. Provisional Patent Application No. 61/332,954 |
| 1016 | International Standard ISO 3630-1, 1st ed. (1992) |
| 1017 | International Standard ISO 3630-1, 2nd ed. (2008) |
| 1018 | Salwa E. Khier et al., *Bending properties of superelastic and nonsuperelastic nickel-titanium orthodontic wires*, 99 AM. J. ORTHODONTICS & DENTOFACIAL ORTHOPEDICS 310 (1991) ("Khier") |
| 1019 | Grégoire Kuhn & Laurence Jordan, *Fatigue and Mechanical Properties of Nickel-Titanium Endodontic Instruments*, 28 J. ENDODONTICS 716 (2002) ("Kuhn") |
| 1020 | U.S. Patent No. 5,628,674 to Heath et al. |
| 1021 | Edgar Schäfer et al., *Bending properties of rotary nickel-titanium instruments*, 96 ORAL SURGERY ORAL MEDICINE ORAL PATHOLOGY 757 (2003) |
| 1022 | U.S. Patent App. Pub. No. 2002/0137008 A1, McSpadden et al. ("McSpadden") |
| 1023 | U.S. Patent No. 7,713,815 B2 to Matsutani et al. ("Matsutani") |
| 1024 | S. Miyazaki et al., *Characteristics of Deformation and Transformation Pseudoelasticity in Ti-Ti Alloys*, 43 J. PHYSIQUE COLLOQUES C4-255 (1982) ("Miyazaki") |
| 1025 | Franklin S. Weine, ENDODONTIC THERAPY, 6th Ed., 2004, Chapter 5 ("Weine") |
| 1026 | Japanese Unexamined Patent Application Publication No. 2006-149675, Matsutani et al. |
| 1027 | English translation of Japanese Unexamined Patent Application Publication No. 2006-149675, Matsutani et al. |

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