UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

US ENDODONTICS, LLC, Petitioner

V.

GOLD STANDARD INSTRUMENTS, LLC,
Patent Owner

Case No. IPR2015-01476 U.S. Patent No. 8,727,773 B2

PETITION FOR INTER PARTES REVIEW

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Submitted Electronically via the Patent Review Processing System



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LISTING OF EXHIBITS

Exhibit #	Exhibit Description
1101	U.S. Patent No. 8,727,773 B2 (the "'773 patent")
1102	Prosecution history of U.S. Patent No. 8,062,033
1103	PCT International Application Publication No. WO 2005/122942 A2 ("2005 PCT application")
1104	Declaration of A. Jon Goldberg
1105	Harmeet Walia et al., "An Initial Investigation of the Bending and Torsional Properties of Nitinol Root Canal Files," 14 J. ENDODONTICS 346 (1988) ("Walia")
1106	Rejection dated March 15, 2015 in European Patent Application No. 05 756 629.1 - 1659
1107	Prosecution history of the '773 patent
1108	Kazuhiko Endo et al., "Effects of Titanium Nitride Coatings on Surface and Corrosion Characteristics of Ni-Ti Alloy," 13 DENTAL MATERIALS J. 228 (1994) ("Endo")
1109	E. Lugscheider et al., "Investigation of the Residual Stress and Mechanical Properties of (Cr,Al)N Arc PVD Coatings Used for Semi-solid Metal (SSM) Forming Dies," 420-421 THIN SOLID FILMS 318 (2002)
1110	Teresa Roberta Tripi et al., "Fabrication of Hard Coatings on NiTi Instruments," 29 J. ENDODONTICS 132 (2003) ("Tripi")
1111	U.S. Patent App. Pub. No. 2002/0137008 A1, McSpadden et al. ("McSpadden")
1112	Orsure W. Stokes et al., "Corrosion in Stainless-Steel and Nickel-Titanium Files," 25 J. ENDODONTICS 17 (1999)
1113	International Standard ISO 3630-1, 1st ed. (1992)



US Endodontics, LLC ("Petitioner") petitions for *Inter Partes* Review ("IPR") under 35 U.S.C. §§ 311-319 and 37 C.F.R., Part 42, of claims 1, 4, 5, 8-10, and 12 of U.S. Patent No. 8,727,773 ("the '773 patent"), filed on April 25, 2012, issued on May 20, 2014, and currently assigned to Gold Standard Instruments, LLC ("GSI" or "Patent Owner"). There is a reasonable likelihood that Petitioner will prevail with respect to at least one claim challenged in this Petition.

I. INTRODUCTORY STATEMENT

This is US Endo's second petition concerning the '773 patent. The first petition—IPR2015-00632 ("the -632 Petition")—explains that the claims of the '773 patent are not entitled to claim the benefit of any earlier filing date because, in their broadest sense, they cover heat-treating a nickel-titanium ("Ni-Ti") endodontic file in *any* type of atmosphere, either reactive or unreactive with the Ni-Ti instrument, to achieve "permanent deformation." IPR2015-00632, Paper 2, at pp. 16-19. In contrast to the claims of the '773 patent, the disclosures in all applications in the claimed priority chain are limited to heat-treating in an *unreactive* atmosphere. *Id.* Every example in the specification of the '773 patent (and the priority applications) describes heat-treating at 500°C for 75 minutes in argon, which Patent Owner acknowledges is unreactive with Ni-Ti. *See* IPR2015-00632, Paper 9, at p. 16; *see also* Ex. 1101 at 4:12-19.



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