

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NITTO DENKO CORP.,

Petitioner

Patent No. 5,959,807

Original Issue Date: September 28, 1999

Title: HEAD SUSPENSION WITH MOTION RESTRAINING TETHERS

**PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 5,959,807
PURSUANT TO 35 U.S.C. § 312 and 37 C.F.R. § 42.104**

Case No. IPR2018-1043

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LISTING OF EXHIBITS

Exhibit	Description
Exhibit 1001	U.S. Patent No. 5,959,807 to Jurgenson
Exhibit 1002	Prosecution History of U.S. Patent No. 5,959,807
Exhibit 1003	U.S. Patent 4,819,094 to Oberg
Exhibit 1004	U.S. Patent 5,463,153 to Hoshino
Exhibit 1005	U.S. Patent 5,530,606 to Baasch
Exhibit 1006	Excerpt from Exhibit K of Complaint, <i>Hutchinson Tech. Inc. v. Nitto Denko Corp. et al.</i> , Case No. 17-cv-01992, pending in the District of Minnesota.
Exhibit 1007	Declaration of Dr. Giora Tarnopolsky
Exhibit 1008	U.S. Patent No. 5,594,607 to Erpelding et al.

Pursuant to 35 U.S.C. §§ 311-319 and 37 C.F.R. § 42, Petitioner Nitto Denko Corp. (“Nitto” or “Petitioner”) respectfully requests *inter partes* review (“IPR”) of claims 1-6, 12-14, and 16-17 of U.S. 5,959,807 (“the ’807 patent”). The ’807 patent identifies Ryan A. Jurgenson as the inventor, was filed June 24, 1997, and issued September 28, 1999. According to U.S. Patent and Trademark Office (“USPTO”) assignment records, the ’807 patent is currently assigned to Hutchinson Technology Inc. (“HTI” or “Patent Owner”). There is a reasonable likelihood that Petitioner will prevail with respect to at least one claim challenged in this Petition.

The ’807 patent relates to a head suspension for a disk drive. Head suspensions—which were long known and used in the prior art—are meant to support and position a “slider” over the drive’s disk surface. The slider is a small block of material that carries the read and write heads used to access information from the disk. The read/write heads are connected to wiring traces that proceed over the surface of the suspension and connect to other hard drive electronics. The traces are electrically isolated from the metal portions of the suspension by a layer of insulation.

According to the ’807 patent, prior art head suspensions are often designed to include a “tongue” or “gimbal” onto which the slider is mounted. The tongue or gimbal is formed by patterning apertures into one of the suspension’s metal

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