

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION.

Petitioner,

v.

SAINT REGIS MOHAWK TRIBE,

Patent Owner

Patent No. 7,620,800

Issued: November 17, 2009

Filed: April 9, 2007

Inventors: Jon M. Huppenthal, David E. Caliga

Title: MULTI-ADAPTIVE PROCESSING SYSTEMS AND
TECHNIQUES FOR ENHANCING PARALLELISM AND
PERFORMANCE OF COMPUTATIONAL FUNCTIONS

Inter Partes Review No. IPR2018-01605

**PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 7,620,800
UNDER 35 U.S.C. §§ 311-319 AND 37 C.F.R. § 42.1-.80 & 42.100-.123**

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I. INTRODUCTION

U.S. Patent No. 7,620,800 (“the 800 Patent”) describes a multiprocessor computer system for performing systolic, data driven processing on reconfigurable computing elements, such as FPGAs. The application from which it issued was filed in 2007.

Systolic data driven processing on multiprocessor systems employing FPGAs was well known by that time. The principal reference relied on here is a 1996 book describing what is likely the most successful example of such a system, the Splash 2 computer. *See* EX1007. Splash 2 was used by numerous scientists and engineers to carry out various types of processing, including numerous systolic applications. As demonstrated below, the Splash 2 book discloses details of the Splash 2 system and of certain processing carried out on that system for the comparison of genetic sequences that together satisfy each and every element of numerous claims of the 800 Patent.

One would think that such a seminal prior art reference would have been provided to the examiner of the 800 Patent, if the applicants had been aware of it. In fact, they were aware of the book, but provided only a small excerpt to the examiner. The face of the 800 Patent and its prosecution history demonstrate that

the applicants disclosed only pages 1-11 of the Splash 2 book and a four-page summary article about Splash 2 and some of its programming, neither of which the examiner relied on. EX1005, Face; EX1006, 49. Those pages of the book describe only the background context of custom computing machines and a brief introduction to Splash 2, EX1007, 1-11, and the article has only a terse few paragraphs about the programming done on the system, EX1060. A fuller description of the system architecture and programming of Splash 2 begins *on page 12* of the book, and continues for the next 188 pages, including an entire chapter – Chapter 8, relied on here – on systolic processing on the Splash 2 computer. EX1007, 12-200.

As demonstrated below, the materials the applicants withheld from the examiner disclose each and every limitation of numerous claims of the 800 Patent, and, either alone or in combination with other materials, render all claims challenged by this Petition unpatentable. Petitioner therefore respectfully requests the challenged claims be cancelled, for the reasons set forth herein.

II. COMPLIANCE WITH REQUIREMENTS FOR INTER PARTES REVIEW

A. Certification the 800 Patent May Be Contested by Petitioner

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