

Paper No. _____

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

XILINX, INC, Petitioner

v.

Patent of INTELLECTUAL VENTURES MANAGEMENT, LLC,
Patent Owner.

Patent No. 5,632,545

Issue Date: May 27, 1997

Title: ENHANCED VIDEO PROJECTION SYSTEM

Inter Partes Review No. IPR2013-00029

XILINX REPLY BRIEF
IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW OF U.S. 5,632,545

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I. Introduction

The evidence in this trial establishes that the claims of the '545 patent are obvious. It is undisputed that the prior art teaches the core claim elements, namely, combining multiple light beams together (each light beam having a separate light sources, color filters and liquid crystal element) to form a composite image suitable for projection. Beyond these undisputed core elements, the prior art also teaches the remaining disputed limitations, as set forth below. IV's arguments to the contrary are not persuasive for the reasons described below. Indeed, in many instances, IV's own expert has conceded that its arguments are incorrect.

The primary disputes in this trial relate to the term "light-shutter matrix system." IV attempts to distinguish the prior art because they use allegedly different types of liquid crystal display devices than those described in the specification (for example, liquid crystal elements that block light through scattering rather than through absorption, or liquid crystal elements that create a liquid crystal matrix using optical addressing instead of electrical addressing). These specification-based distinctions find no support in the claim language, and thus do not salvage the validity of the '545 patent.

The other notable dispute is whether the Flasck reference discloses a "video" projection system. IV asserts that Flasck uses a type of liquid crystal material (called "PDLC") that would have been too slow for video display systems in 1996.

But IV's own evidence shows that PDLC *projection televisions* existed before 1996, as even IV's expert, Mr. Smith-Gillespie, now concedes:

Q And the Kunigada reference is a discussion of a PDLC display technology, right?

A Yes.

Q And, in fact, it looks like they made a full color projection TV using PDLC technology, right?

A That's what it says.

Q And that's not something you were aware of when you were testifying about PDLC technology earlier today, right?

A Apparently not.

Q Okay. So this example shows that people before 1996 did, in fact, use PDLC to make a video display system, right?

A At least in the lab.

Q At least in the lab?

A Yes.

[Ex. 1014 (Smith-Gillespie Tr. at 150:21-151:11)]

Finally, IV's opposition raises many additional issues that are also addressed below. But none of IV's arguments in favor of validity change the conclusion that the claims are obvious in light of the prior art.

II. Disputed Issues Of Fact

The following factual issues are disputed:

1. Does Flasck disclose a video projection system?
2. Does Flasck disclose a light-shutter matrix system? (Only disputed if the

Board adopts IV’s proposed construction.)

3. Does Takanashi disclose a light-shutter matrix system?
4. Does the combination of Takanashi and Lee disclose a video controller?
5. If not, would the video controller element nevertheless have been obvious to a person having skill in the art in 1996?
6. Does Takanashi disclose equivalent switching matrices?

III. Claim Construction

There are three disputed terms. Two of them, “light-shutter matrix system” and “video controller adapted for controlling the light-shutter matrices,” were construed in the Board’s Initial Decision. IV’s Opposition requests construction of an additional term, “equivalent switching matrices,” which the Board construed in its decision to institute the ’334 IPR. IV’s brief also discusses the preamble term “video projector system,” but does not actually propose a construction.

As explained below, Xilinx agrees to the Board’s preliminary constructions and disagrees with IV’s proposed constructions.

A. “light-shutter matrix system”

Board Preliminary Construction	IV Proposed Construction
A set of matrices, such as monochrome LCD arrays, where each matrix comprises a rectangular arrangement of elements capable of limiting the passage of light.	A two-dimensional array of elements that selectively admit and block light.

Xilinx agrees with the Board that a “light-shutter matrix system” in the context of the ’545 patent contains elements that are “capable of limiting the

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