

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

HANSHOW AMERICA INC.,
HANSHOW TECHNOLOGY CO., LTD.,

Petitioners

v.

SES-IMAGOTAG GMBH,

Patent Owner

Case No.: IPR2024-00188

Patent No. 11,405,669

**PETITIONERS' OBJECTIONS TO PATENT OWNER'S
DEMONSTRATIVES**

Pursuant to the Order Setting Oral Argument (Paper 33, "Order"), Petitioners submit the below objections to certain of Patent Owner's demonstratives. The parties have met and conferred in good faith concerning the demonstratives, as required by the Order, and timely submit these unresolved objections. A copy of the objected-to portions of the demonstratives is attached hereto as Exhibit A.

Slide 9 (Objection to annotations to Claim 1 of Ex. 1001) Petitioners object because Patent Owner's annotations to Claim 1 do not appear within any papers and presents improper new argument.

Slides 19, 20, 21, 22, 23 (Objection to annotated cropped Figure 1 of Ex. 1005) Petitioners object because the cropped Figure 1 of Ex. 1005 and annotations and remarks contained in the figure do not appear within any papers and are improper new evidence.

Slide 24 (Objection to title, "Not Its Own Displayed Frame") Petitioners object because the term "Own Displayed Frame" does not appear within any papers and presents improper new argument.

Slides 62, 63, 64, 65, 66 (Objection to Entire Slides) Petitioners object because Patent Owner presents new arguments that were not included in Patent Owner's briefings.

Date: February 14, 2025

Respectfully submitted,

/Hao Tan/

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Attorney For Petitioners

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), I hereby certify that, on February 14, 2025, a true and correct copy of PETITIONERS' OBJECTIONS TO PATENT OWNER'S DEMONSTRATIVES has been served via e-mail to the Petitioner by serving the below-listed attorneys of record for Petitioner in the concurrent proceeding:

Jessica Kaiser (Kaiser-ptab@perkinscoie.com)
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Attorney For Petitioners

Exhibit A

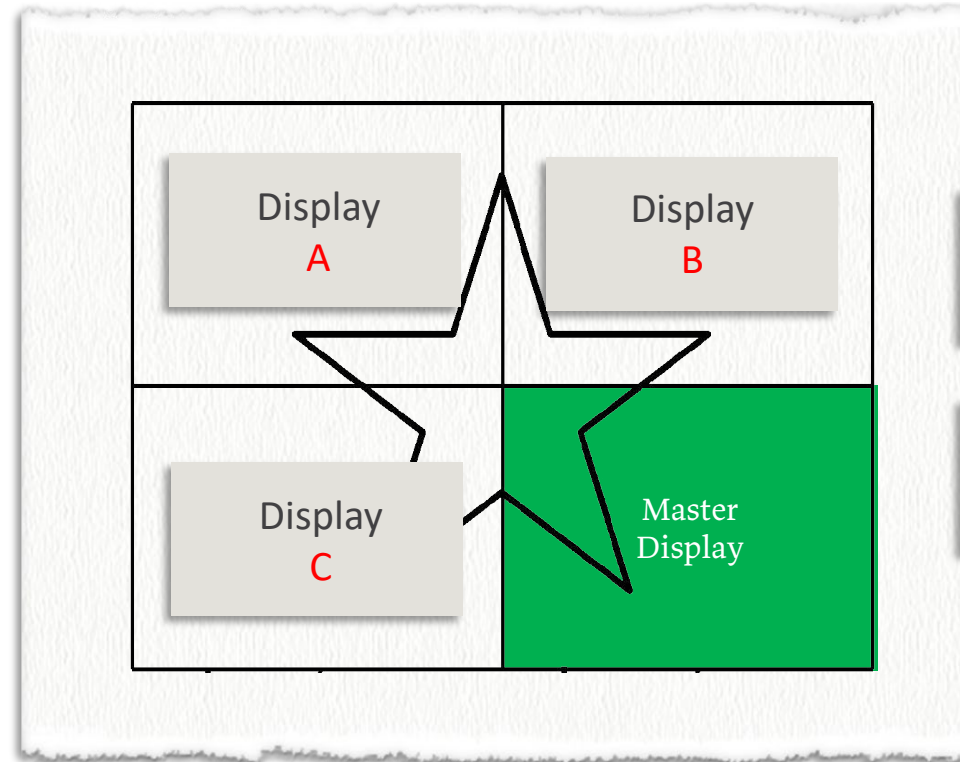
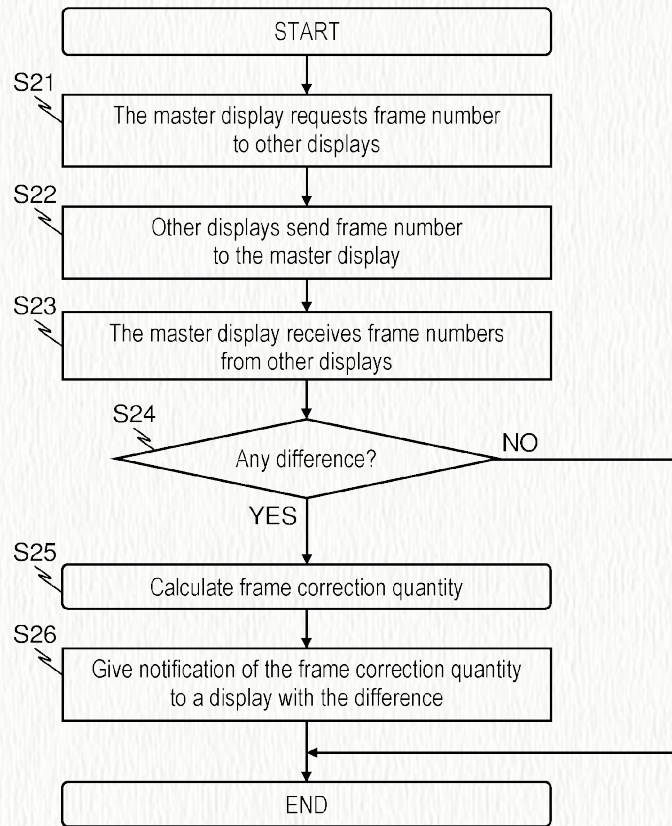
The Claims Expressly Reference Two Devices *Each* Configured to Reciprocally Transmit and Determine

1. A video playback system (1), comprising a number of playback devices (6A, 6B) to playback a video on their screens (5), each playback device (6A, 6B) comprises a memory to store video data (9) representing said video, and a communication stage to communicate data with each other, wherein the devices (6A, 6B) are designed:
to transmit video playback progress data via the communication stage to the other device (6B, 6A); and,
to determine based on the received progress data whether it is in a synchronous or asynchronous playback progress with the other devices (6B, 6A)
wherein the display devices (6A, 6B) are designed to display product information or product price related information by means of virtual electronic shelf labels displayed within a section of a screen's (5) display area overlapping with a video content or substituting a video content of said section.

'669 Patent, Claim 1

Masumoto 5th Embodiment

FIG. 9



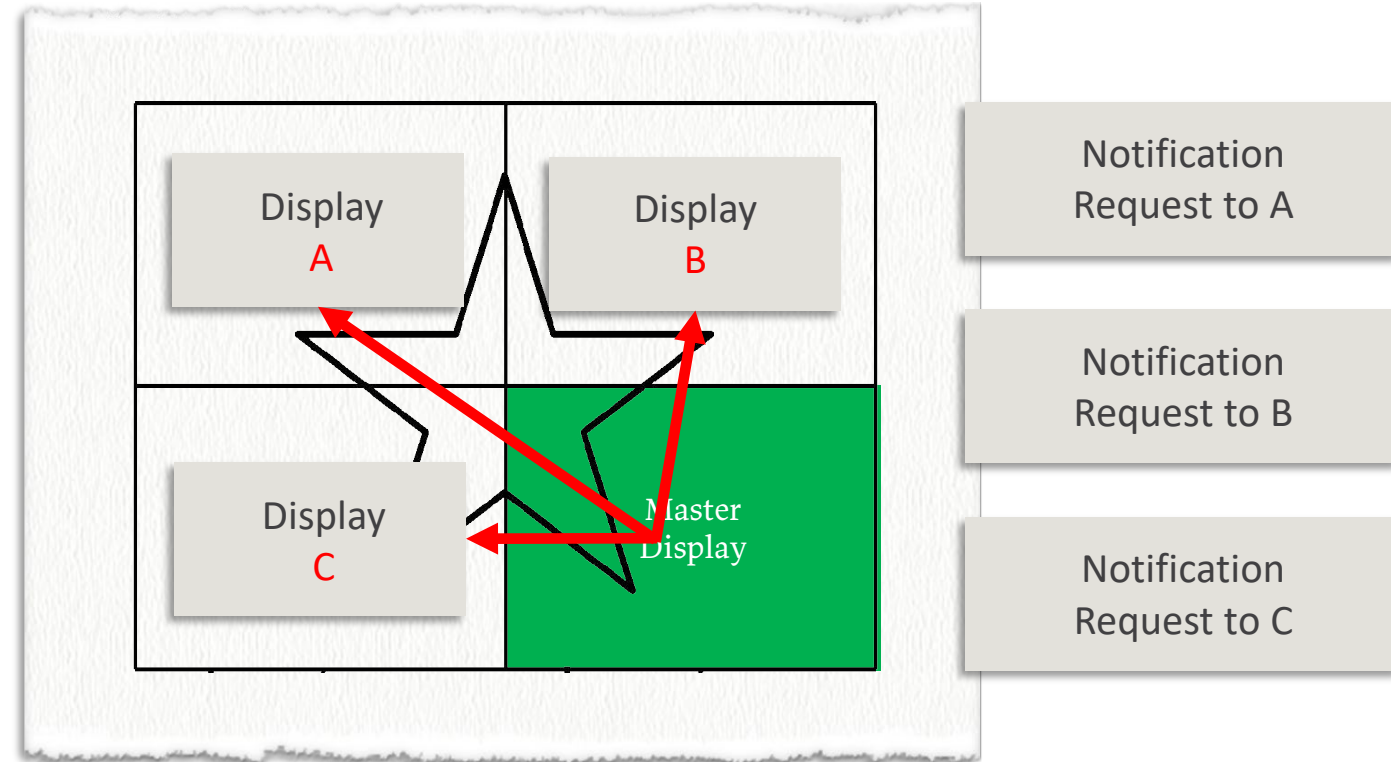
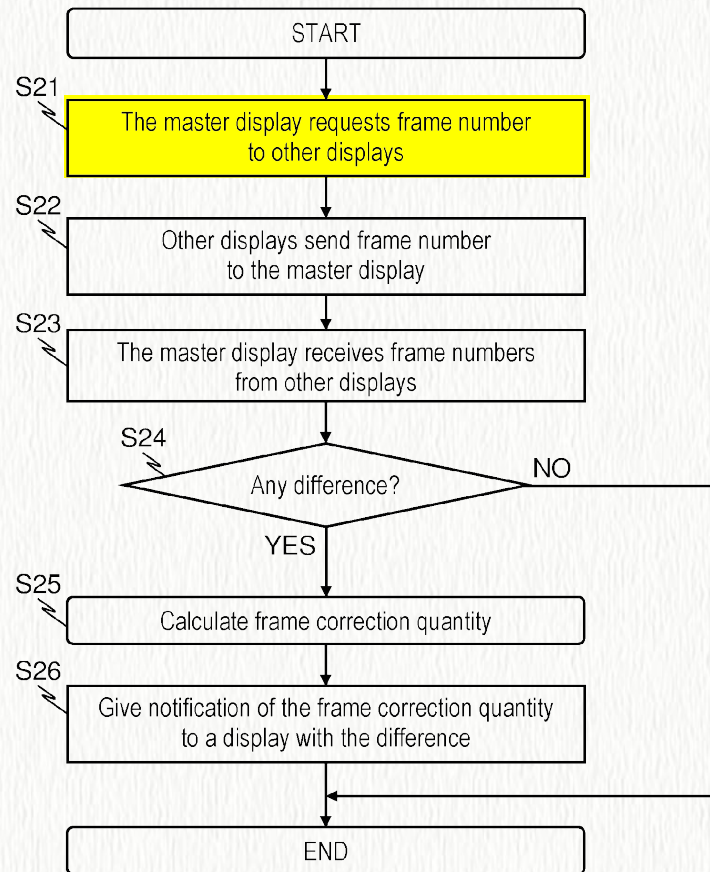
Masumoto, Fig. 1 (excerpted, annotated), [0108]

Only 1 Master Display

ID'd @ Start up or installation

Masumoto 5th Embodiment

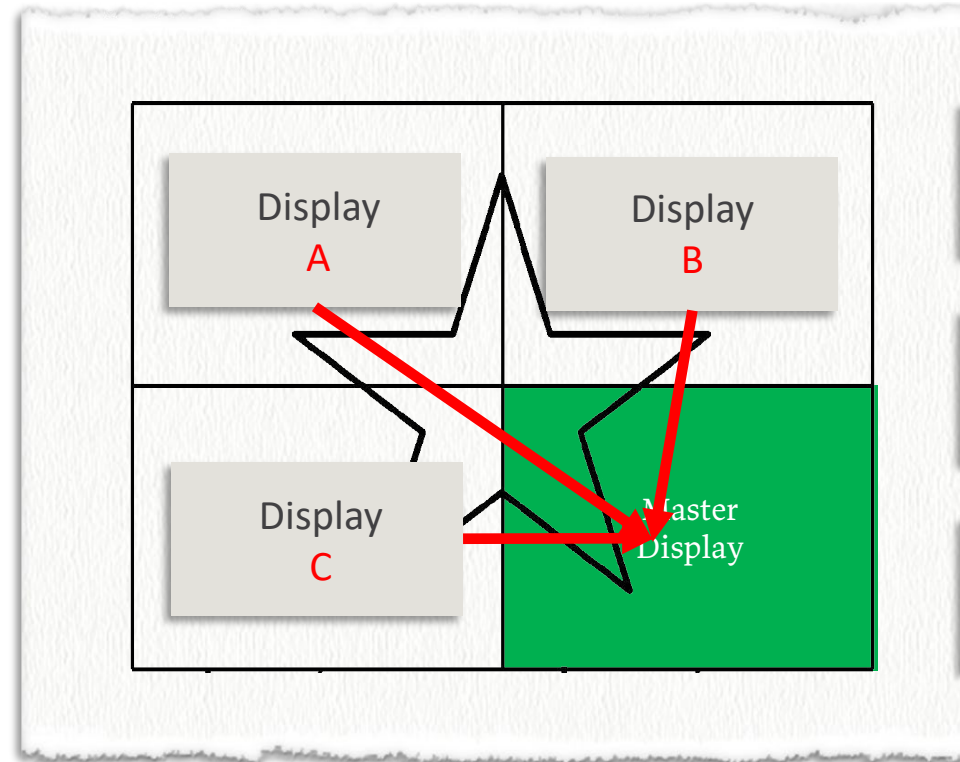
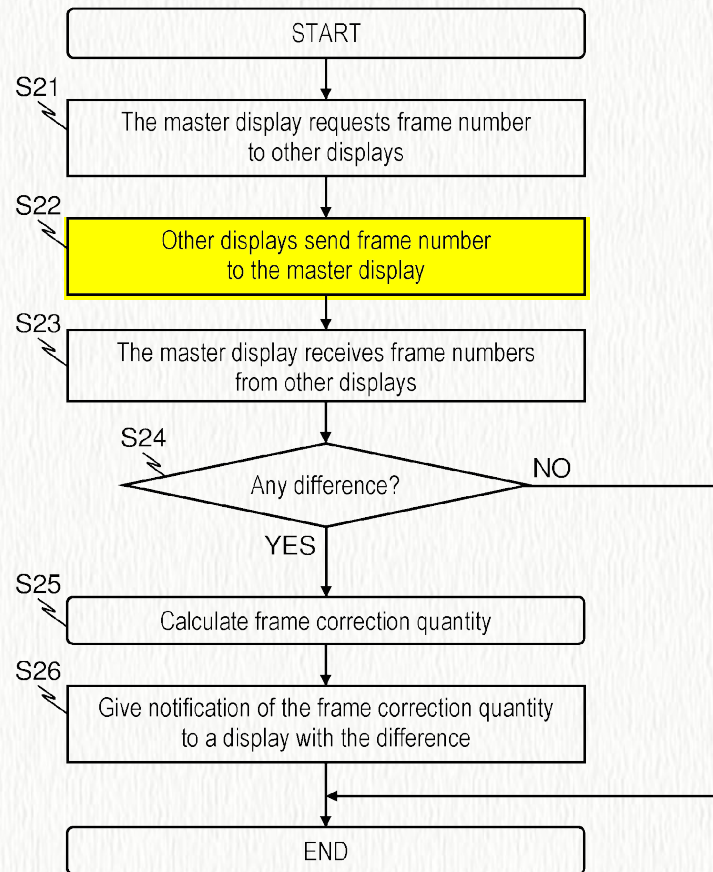
FIG. 9



Masumoto, Fig. 1 (excerpted, annotated), [0108]

Masumoto 5th Embodiment

FIG. 9



A sends frame # + time

B sends frame # + time

C sends frame # + time

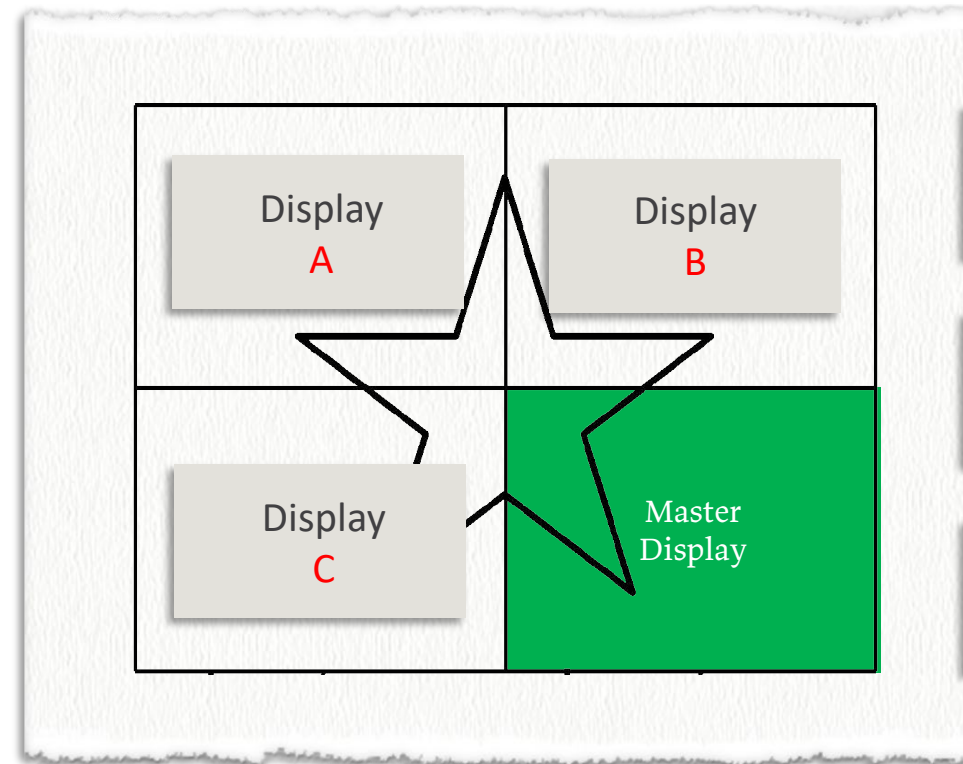
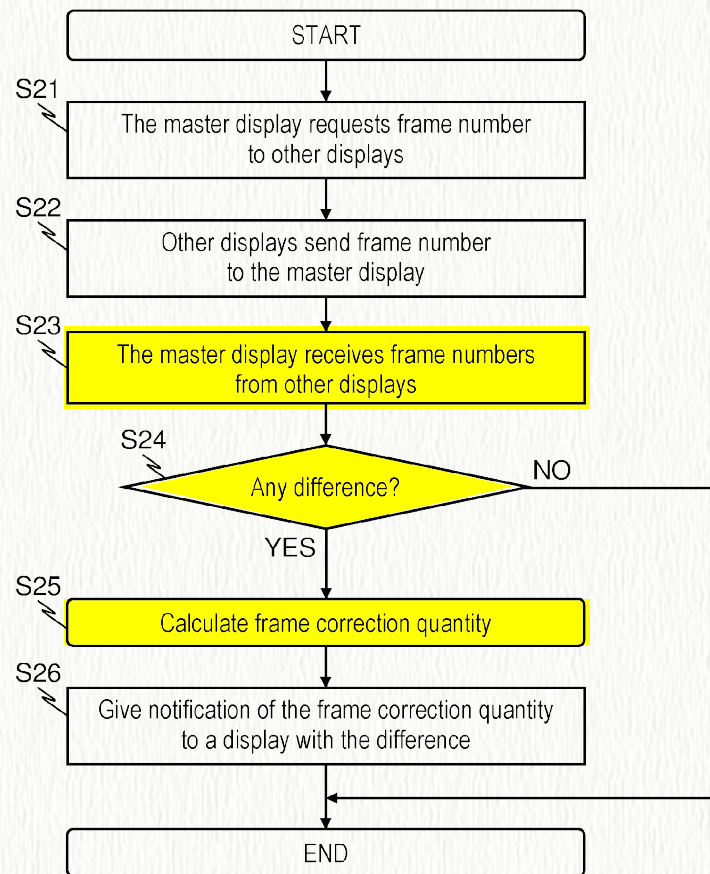
Masumoto, Fig. 1 (excerpted, annotated), [0110]

POR, 28-30; Hart, ¶¶112-27

IPR2024-00188 DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Masumoto 5th Embodiment

FIG. 9



A = frame 7190
@120 sec

Desired @ 120 = 120
sec x 60 fps = 7200

Correction 7200-
7190=10

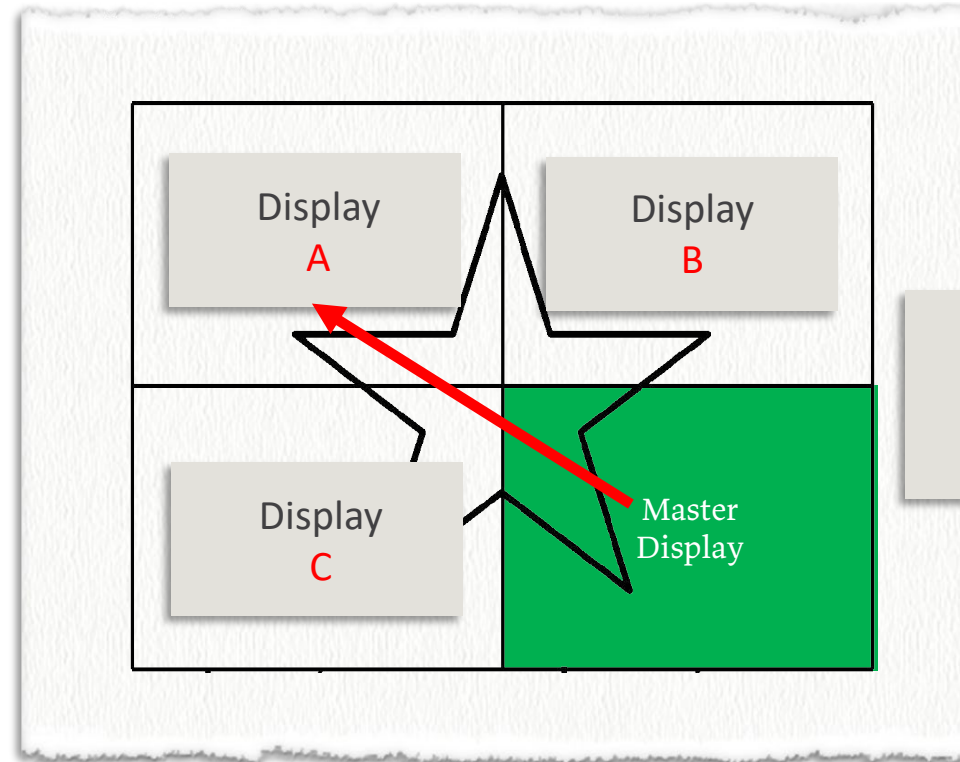
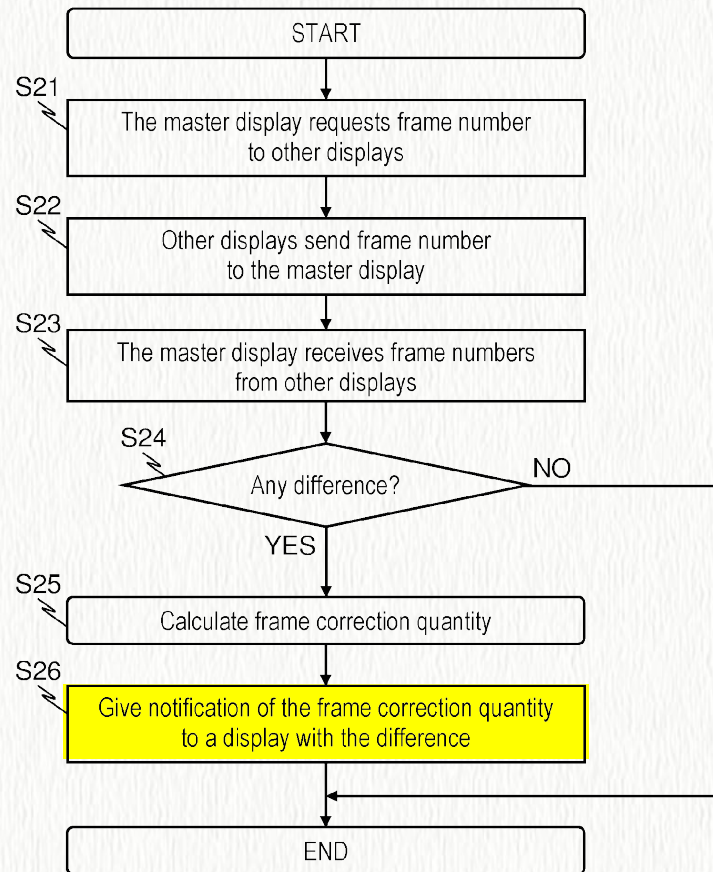
Masumoto, Fig. 1 (excerpted, annotated), [0111]-[0115]

POR, 28-30; Hart, ¶¶112-27

IPR2024-00188 DEMONSTRATIVE EXHIBIT – NOT EVIDENCE

Masumoto 5th Embodiment

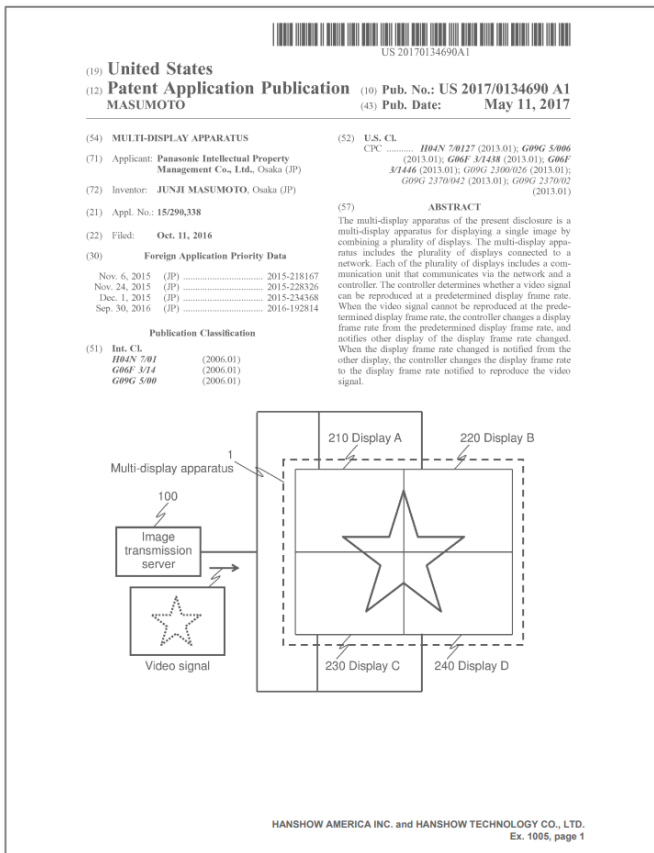
FIG. 9



Notification to skip
10 frames **only** to A

Masumoto, Fig. 1 (excerpted, annotated), [0118]

Tomoto's Master Determines Synchronicity By Calculating a "Desired Frame," and Not Its Own Displayed Frame



[0112] Next, display D240 receives a frame number of video signal displayed in each display at specific time from other display A210 to display D230 (Step S23).

[0113] Display D240 calculates a desired frame number at
specific time notified in Step S21, and compares its calcu-
lation result with the frame number received in step S23 for
each display to determine any difference (Step S24).

[0114] For example, a desired frame number displayed at 2 minutes and 0 second in a 60-fps video signal is frame No. 7200 according to the next formula.

120 sec×60 fps=Frame No. 7200

[0115] If the frame number received from display A210 in Step S23 is No. 7190, display on display A210 is delayed from the required value for:

(Frame No. 7200)-(Frame No. 7190)=10 frames, or

$$10 \text{ frames} \times (1/60 \text{ fps}) = 0.16 \text{ sec.}$$

Masumoto, [0112]-[0115]

The Board Was Skeptical of the Combinations

Trials@uspto.gov
571-272-7822

Paper 11
Date: May 20, 2024

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IPR2024-00188
Patent 11,405,669 B2

Before JAMES P. CALVE, BRIAN J. McNAMARA, and
TERRENCE W. McMILLIN, *Administrative Patent Judges*.

McMILLIN, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

having different widths and heights.” *Id.* Although it is true that the video playback displays in Swafford and Masumoto are quite different and require different considerations, at least at this stage, we determine that does not

DI, 40

The Board Was Skeptical of the Combinations

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However, we do agree with Patent Owner that Petitioner's contention that the cited combination of teachings is supported "because of the structural similarity between Swafford's and Masumoto's devices" (Pet. 54–55) does not provide a motivation to combine. Prelim. Resp. 35–36. The only structural similarity relied on by Petitioner in support of this argument is that Swafford and Masumoto both disclose use of LCDs. *See* Pet. 54–55. Petitioner provides an inadequate explanation as to how or why the use of LCDs which are a common form of video displays would motivate the combination of the relied-upon teachings. But, this deficiency does not

DI, 41

The Board Instituted Without Competing Testimony

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Petitioner filed a Declaration of Dr. Manos M. Tentzeris. (Ex. 1003) in support of its Petition. Patent Owner did not submit any testimony in support of its arguments, so the testimony of Dr. Tentzeris is un rebutted by any contrary testimony at this stage.

DI, 7

Patent Owner argues that all of the articulated rationales in the Petition for combining Masumoto, Kipp, and Takashi “are flawed.” Prelim. Resp. 37. We have considered Patent Owner’s arguments that are unsupported by any expert testimony (*see id.* at 37–41), but give more weight to the showing in the Petition that is supported by expert declaration testimony (*see* Pet. 82–87 (citing Ex. 1003 ¶¶ 218, 224–232)).

DI, 60

Patent Owner Provided Dr. Hart's Testimony, Which Petitioner Did Not Rebut

IPR2024-00188
Declaration of John Hart, Ph.D.

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DECLARATION OF JOHN HART, PH.D.

59. Notably, while Petitioner's expert, Dr. Tentzeris, may meet his specific definition of a POSITA, I believe that he is not an expert in the relevant subject matter of the '669 Patent. Dr. Tentzeris has experience with "antennas, fractal RF structures and circuit design...." Ex. 1003, ¶ 2. Based on my review, Dr. Tentzeris does not describe any experience with or expertise in digital video, let alone video synchronization between multiple playback devices. I reviewed Dr. Tentzeris's CV, as well as the discussion of experience in his deposition, and I found no expertise in any of the '669 Patent's subject matter areas of pictorial communication, television,

Hart, ¶ 59

Dr. Hart's Testimony is Determinative

8. I am a tenured full Professor of Computer Science in the Siebel School of Computing and Data Science at the University of Illinois at Urbana-Champaign, a program consistently ranked in the top five by U.S. News & World Report. As an educator for the past three decades, I have taught courses to thousands of students on a variety of topics in visual computing, including computer graphics, data visualization, virtual reality and multimedia systems. I also strive to provide opportuni-

10. I am an internationally recognized leader in the field of visual computing. The Association for Computing Machinery (ACM) is the main worldwide or-

11. This report is on the subject of multimedia systems for synchronizing the display of video. I have worked on a variety of methods and multimedia systems for the processing and display of video. This work has included multimedia systems

15. I have also worked on the synchronization of multiple video streams across networks between multiple clients for applications in virtual reality.

Hart, ¶¶ 8, 10, 11, 15

2. As described in my curriculum vitae, I have more than 30 years of industry and academic experience. I have experience with antennas, fractal RF structures and circuit design for these systems. As a professor of Electrical and Computer Engineering, I have taught courses relating to antenna and electromagnetic technologies. A complete list of my teaching positions, honors, and classes taught

8. I have authored or contributed to over 30 books and 850 refereed journal and conference papers; spoke in over 140 presentations, many of which relate to antennas, antenna arrays, RFID systems, and other modes of wireless communication and electronics design. A complete list of my publications and conference presentations is included in my *curriculum vitae*.

Tentzeris, ¶¶ 2, 8