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Stanzione & Kim, LLP 919 18th Street, NW Suite 440 Washington, DC 20006			YENKE, BRIAN P	
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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* SEUNG-HO JANG, and IL-KI MIN,

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Appeal 2012-000403  
Application 11/382,955  
Technology Center 2400

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*Before* THU A. DANG, JAMES R. HUGHES, and  
GREGORY J. GONSALVES, *Administrative Patent Judges*.

GONSALVES, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the final rejection of claims 1-23 (App. Br. 1). We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

*The Invention*

Exemplary Claim 1 follows:

1. A control method of a display apparatus including a video signal processing unit to process input first and second video signals in a PIP mode, and a display unit on which the first and the second video signals processed by the video signal processing unit are displayed, the control method comprising:

processing the first and the second video signals in the PIP mode when a PIP function is selected, and displaying the first video signal as a main screen and the second video signal as a sub screen on the display unit; and

adjusting transparency of the sub screen according to an absence of the second video signal for a predetermined period of time, where the transparency is periodically adjusted by a predetermined adjustment level as the time of the absence of the second video signal elapses.

Claims 1-23 are obvious under 35 U.S.C. §103(a) over Cohen-Solal (U.S. Pat. Publication No. 20020075407 A1, Jun. 20, 2002) in view of Sloo (U.S. Patent No. 7633554 B2, Dec. 15, 2009, filed eff. Jan. 6, 2006), Hailey (U.S. Patent No.5, 194,951, Mar. 16, 1993) and Dimitrova (U.S. Pat. Publication No. 2002/0140862 A1, Oct. 3, 2002) (Ans. 4-9).

## FACTUAL FINDINGS

We adopt the Examiner's factual findings as set forth in the Answer (Ans. 3, *et seq.*).

## ISSUE

Appellant's responses to the Examiner's positions present the following issue:

Did the Examiner err in concluding that the combination of Leonard and Eberhard teaches or suggests "adjusting transparency of the sub screen *according to an absence of the second video signal for a predetermined period of time*, where the transparency is *periodically adjusted by a predetermined adjustment level as the time of the absence of the second video signal elapses*," as recited in independent claim 1 (emphasis added), and as similarly recited in independent claims 5, 9, 20, and 23?

## ANALYSIS

Appellant contends that the Examiner erred in concluding that independent claims 1, 5, 9, 20, and 23 are obvious because the combination of Cohen-Solal, Sloo, Hailey, and Dimitrova does not teach the claim limitation emphasized above (App. Br. 5). In particular, Appellant argues that "Cohen-Solal describes rendering a PIP display transparent when an important portion of the primary display image is obscured by the PIP, and there are no other suitable positions or sizes available for the PIP - not periodically adjusting a transparency of a sub screen by a particular adjustment level as the time of the absence of a video signal elapses" (App. Br. 6 (emphasis omitted)).

Appellant also argues that “Sloo describes overlaying interactive information on top of an already-existing video signal where the opacity of the additional interactive information is at least 70%, not periodically adjusting a transparency of a sub screen by a particular adjustment level as the time of the absence of a video signal elapses” (*id.* (emphasis omitted)). In addition, Appellants argue “that Hailey describes enlarging the margins of a display to reduce a viewable picture area, not periodically adjusting a transparency of a sub screen by a particular adjustment level as the time of the absence of a video signal elapses” (*id.* at 7). Appellants also argue that “[a]t best, Dimitrova describes changing the transparency of the PIP image so that the main picture is more visible, not periodically adjusting a transparency of a sub screen by a particular adjustment level as the time of the absence of a video signal elapses (*id.*).

The Examiner concluded, however, that the combination of Cohen-Solal, Sloo, Hailey, and Dimitrova teach the disputed claim limitation (Ans. 13-20). In particular, the Examiner reasoned that “[t]he combination of Cohen-Solal/Sloo would provide a system that adjusts the transparency of the sub-image when the received sub-image was blocking/obstructing/ - interfering with the main image, and then the sub-image would be [darkened] (gradually) (via Hailey) in the event the sub-image was about to turn off, informing the user that the sub-image will gradually disappear” (*id.* at 17-18).

We agree with the Examiner’s conclusion and reasoning. Appellants cannot show nonobviousness by attacking references individually when the rejection is based on a combination of references. *In re Keller*, 642 F.2d 413, 425 (CCPA 1981). Cohen-Solal discloses that “in response to the

processor detecting that an important portion of the primary display image is obscured by the PIP, the processor may determine to render the PIP transparent in response to determining that there are no other suitable positions and/or sizes for the PIP” (¶[0036]). Sloo discloses “making the interactive information partly transparent before overlaying it atop the already-existing video signal.”(col. 2, ll. 34-37). Hailey teaches that as a sleep timer approaches expiration, increasing “the area of the borders at a fixed interval (perhaps once every second), which causes the borders to ‘grow’ and to slowly obscure the displayed video image” (col. 3, l. 66 – col. 4, l. 4).

Accordingly, the claim requirement of gradually adjusting the transparency of a sub screen according to an absence of a signal for a period of time is a combination of the familiar element of making a sub-screen transparent as taught by Cohen-Solal and Sloo, and darkening a screen gradually as a timer approaches a predetermined time period as taught by Hailey that would have yielded predictable results. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007). Thus, we find no error in the Examiner’s obviousness rejection of independent claims 5, 9, 20, and 23 as well as the claims dependent therefrom (*i.e.*, claims 2-4, 6-8, 21, and 22) because Appellants did not set forth any separate and distinct patentability arguments for the dependent claims (*see* App. Br. 12).

## DECISION

We affirm the Examiner’s decision rejecting claims 1-23 as being unpatentable under 35 U.S.C. § 103(a).

Appeal 2012-000403  
Application 11/382,955

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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