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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* MICHAEL G. ROBINSON, GRAHAM J. WOODGATE, and  
JONATHAN HARROLD

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Appeal 2020-001252  
Application 14/751,878  
Technology Center 2800

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Before ERIC B. CHEN, JEREMY J. CURCURI, and IRVIN E. BRANCH,  
*Administrative Patent Judges.*

BRANCH, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE<sup>1</sup>

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>2</sup> appeals from the  
Examiner’s decision to reject claims 1–5, 10, 20, 21, and 27, which are all of

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<sup>1</sup> We refer to the Specification, filed June 26, 2015 (“Spec.”); Final Office Action, mailed December 13, 2018 (“Final Act.”); Appeal Brief, filed June 11, 2019 (“Appeal Br.”); Examiner’s Answer, mailed October 3, 2019 (“Ans.”); and Reply Brief, filed December 3, 2019 (“Reply Br.”).

<sup>2</sup> We use the word Appellant to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as RealD Spark, LLC. Appeal Br. 3.

the claims pending in the application. *See* Final Act. 1. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

### CLAIMED SUBJECT MATTER

The claims are directed to a directional privacy display. Spec. Abstract. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A directional display apparatus comprising:  
a directional backlight comprising  
    a waveguide comprising first and second, opposed guide surfaces for guiding input light along the waveguide, and  
    an array of light sources arranged to generate the input light at different input positions across the waveguide,  
    wherein the first guide surface is arranged to guide light by total internal reflection, the second guide surface comprises a plurality of light extraction features arranged to deflect light guided through the waveguide out of the waveguide through the first guide surface as output light and intermediate regions between the light extraction features that are arranged to guide light along the waveguide, and the waveguide is arranged to direct the output light into optical windows in output directions that are distributed in a lateral direction in dependence on the input position of the input light;  
    a transmissive spatial light modulator arranged to receive the output light from the first guide surface of the waveguide and to modulate it to display an image; and  
    a control system capable of controlling the spatial light modulator and capable of selectively operating of light sources to direct light into corresponding optical windows, wherein stray light in the directional backlight is directed in output directions outside the optical windows corresponding to selectively operated light sources,

the control system is arranged to control the spatial light modulator and the array of light sources in synchronization with each other so that:

(a) the spatial light modulator displays a primary image while at least one primary light source is selectively operated to direct light into at least one primary optical window for viewing by a primary observer, and

(b) in a temporally multiplexed manner with the display of the primary image, the spatial light modulator displays a secondary image while at least one light source other than the at least one primary light source is selectively operated to direct light into secondary optical windows outside the at least one primary optical window, the secondary image as perceived by a secondary observer outside the primary optical window obscuring the primary image that modulates the stray light directed outside the primary optical window,

wherein light through the spatial light modulator directed to the secondary observer has a non-zero luminance that provides for reduced contrast of at least one of the primary image and the secondary image compared to contrast of the at least one of the primary image and secondary image as viewed by the primary observer.

#### REFERENCES

The prior art relied upon by the Examiner is:

<b>Name</b>	<b>Reference</b>	<b>Date</b>
Chung	US 2007/0121047 A1	May 31, 2007
Robinson	US 2012/0127573 A1	May 24, 2012

#### REJECTION

Claims 1–5, 10, 20, 21, and 27 stand rejected under 35 U.S.C. § 103 as unpatentable over the combination of Robinson and Chung. Final Act. 3–12.

## ANALYSIS

We have reviewed the Examiner's rejections in light of Appellant's arguments. We have considered in this Decision only those arguments Appellant actually raised in the Briefs. Any other arguments Appellant could have made but chose not to make in the Briefs are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

To the extent consistent with our analysis herein, we adopt as our own the findings and reasons set forth by the Examiner in (1) the action from which this appeal is taken (Final Act. 3–12) and (2) the Examiner's Answer in response to Appellant's Appeal Brief (Ans. 3–5) and concur with the conclusions reached by the Examiner. We highlight the following for emphasis.

Because Appellant argues the claims collectively and does not dispute that all the limitations of claim 1 preexisted Appellant's invention, the sole issue before us is whether the Examiner's reasoning for combining the references lacks a rational underpinning. *See* Appeal Brief 11–12; Reply Br. 4–6. For at least the reasons stated by the Examiner (Ans. 4–5), we are not persuaded of error.

“The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007) (quoting *KSR*, 550 U.S. 398 (2007)). Here, because there is no dispute that Appellant's claim amounts to a combination of familiar elements, and because Appellant offers no persuasive evidence that unknown methods were used by Appellant or that the results were unpredictable, Appellant's claim is “likely to be obvious” according to our reviewing court.

The Examiner finds the combination to be obvious “for the purpose of utilizing a display with an adjustable viewing mode and which protects a user’s privacy in a crowded place.” Final Act. 7, (emphasis omitted) (citing Chung ¶ 32 (“An object of the present invention is to provide an in-plane switching mode liquid crystal display device with an adjustable viewing angle . . . in which a notebook user’s privacy and/or security can be protected even in a crowd public place . . . .”)).

Appellant contends “the Office Action fails to provide proper motivation for modifying Robinson in view of Chung” because “Robinson already provides for a display with an adjustable image and a privacy mode, which amounts to a solution for which the Office Action incorporates Chung.” Appeal Br. 12.

Appellant does not provide sufficient persuasive evidence or argument to persuade us of error in the Examiner’s reasoning. Final Act. 7 (“for the purpose of utilizing a display with an adjustable viewing mode and which protects a user’s privacy in a crowded place”). In particular, we do not agree with Appellant that Robinson’s “adjustable image and a privacy mode” “amounts to” “utilizing a display with an adjustable viewing mode and which protects a user’s privacy in a crowded place,” i.e., Examiner’s reasoning. Final Act. 7. Appellant quotes from Robinson then declares—without explanation— that “Robinson does teach a display with an adjustable image and a privacy mode.” Appeal Br. 12. Without more, we are not persuaded that this key premise of Appellant’s argument against obviousness is true.

In contrast, the Examiner provides evidence that the motivation to “utilize[] a display with an adjustable viewing mode and which protects a user’s privacy in a crowded place” pre-existed Appellant’s claimed

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invention. Final Act. 7 (emphasis omitted) (citing Chung ¶ 32). We determine the Examiner's reasoning is rational and supported by evidence drawn from the record, and Appellant's arguments do not persuade us otherwise.

Accordingly, we are unpersuaded of error in the Examiner's rejection of all pending claims.

#### DECISION SUMMARY

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>References</b>	<b>Affirmed</b>	<b>Reversed</b>
1-5, 10, 20, 21, 27	103	Robinson, Chung	1-5, 10, 20, 21, 27	

#### TIME PERIOD FOR RESPONSE

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

AFFIRMED