2022-1292

United States Court of Appeals for the Federal Circuit

In re: CELLECT, LLC, *Appellant*,

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in *Ex Parte* Reexamination Control No. 90/014,452

REPLY BRIEF FOR APPELLANT CELLECT, LLC

Paul J. Andre James R. Hannah KRAMER LEVIN NAFTALIS & FRANKEL LLP 333 Twin Dolphin Dr., Suite 700 Redwood Shores, CA 94065 Telephone: (650) 752-1700

Jonathan Caplan Jeffrey Price KRAMER LEVIN NAFTALIS & FRANKEL LLP 1177 Avenue of the Americas New York, NY 10036 Telephone: (212) 715-7502

ATTORNEYS FOR CELLECT, LLC

CERTIFICATE OF INTEREST

Counsel for Appellant Cellect, LLC certifies the following:

1. The full name of every party represented by us is:

Cellect, LLC

2. The name of the real party in interest represented by us is:

None.

3. All parent corporations and any other publicly held companies that own 10 percent or more of the stock of the party:

Micro-Imaging Solutions LLC

4. The names of all law firms and the partners or associates that appeared for Cellect, LLC before the Patent Trial and Appeal Board or are expected to appear in this court (and who have not or will not enter an appearance in this case) are:

None.

- 5. The title and number of any case known to counsel to be pending in this or any other court or agency that will directly affect or be directly affected by this court's decision in the pending appeal:
 - *In re: Cellect, LLC*, Nos. 22-1293, -1294, -1295, -1296 (Fed. Cir.)
 - Cellect, LLC v. Samsung Electronics Co., No. 1:19-cv-00438-CMA-MEH (D. Co.).
- 6. Organizational Victims and Bankruptcy Cases. Provide any information required under Fed. R. App. P. 26.1(b) (organizational victims in criminal cases) and 26.1(c) (bankruptcy case debtors and trustees). Fed. Cir. R. 47.4(a)(6):

Not applicable.

Dated: September 15, 2022 /s/ Paul J. Andre

Paul J. Andre James R. Hannah Kramer Levin Naftalis & Frankel LLP 333 Twin Dolphin Dr., Suite 700 Redwood Shores, CA 94065 Tel: (650) 752-1700

Fax: (650) 752-1700 Fax: (650) 752-1800 pandre@kramerlevin.com jhannah@kramerlevin.com

Jonathan Caplan Jeffrey Price Kramer Levin Naftalis & Frankel LLP 1177 Avenue of the Americas New York, NY 10036 Tel: 212.715.7502

Fax: 212.715.8302 jcaplan@kramerlevin.com jprice@kramerlevin.com

Attorneys for Appellant Cellect, LLC

TABLE OF CONTENTS

D. IIID OD. II			<u>Page</u>
INTRODU	CTIO	N	1
ARGUME	NT		3
I.	USP Clai The	3	
	A.	Selectively Varying Integration Periods Means Selectively Varying Integration Periods	6
	В.	USPTO Repeatedly Mischaracterizes The Record Below Where Cellect Consistently Argued that the Time Select Switch Limitation Includes Circuitry for Selectively Varying Integration Periods	10
III.	USPTO's Response Does Not Justify The Board's Obviousness Finding Over <i>Tomoyasu</i> Based On An Incorrect Claim Construction		14
	A.	USPTO Admits that <i>Tomoyasu</i> is a CCD Device and Thereby Concedes that <i>Tomoyasu</i> Cannot Teach or Suggest a Remote Time Select Switch that Varies Integration Periods to Improve the Quality of the Same Image	14
	B.	The Board's Obviousness Conclusion is Not Supported by Substantial Evidence	18
CONCLUS	SION.		21

TABLE OF AUTHORITIES

Pa	ige(s)
Cases	
kzo Nobel Coatings, Inc. v. Dow Chem. Co., 811 F.3d 1334 (Fed. Cir. 2016)	7
Continental Circuits LLC v. Intel Corp., 915 F.3d 788 (Fed. Cir. 2019)	9
GE Lighting Sols., LLC v. AgiLight, Inc., 750 F.3d 1304 (Fed. Cir. 2014)	.9, 10
iebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898 (Fed. Cir. 2004)	10
Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005)	5
Profectus Tech. LLC v. Huawei Techs. Co., 823 F.3d 1375 (Fed. Cir. 2016)	8
n re Smith Int'l, Inc., 871 F.3d 1375 (Fed. Cir. 2017)	8
t. Jude Med., LLC v. Snyders Heart Valve LLC, 977 F.3d 1232 (Fed. Cir. 2020)	7, 9
Thorner v. Sony Comput. Ent. Am. LLC, 669 F.3d 1362 (Fed. Cir. 2012)	9

INTRODUCTION

The Board's decision regarding the '740 Patent should be reversed because it is based on the Board's erroneous construction of the remote time select switch limitation and is not supported by substantial evidence. USPTO's Response Brief highlights the reversible errors committed by the Board regarding the elements of the remote time select switch limitation at issue on appeal.

First, the remote time select switch must selectively vary integration periods and thus requires associated circuitry for performing that function. USPTO concedes that the plain language of the challenged claims includes the function of "selectively varying integration periods." USPTO Br. at 22. However, USPTO then ignores that function and fails to justify the Board's error in adopting a construction that does not require the associated circuitry for this function.

Second, the '740 Patent discloses and claims the ability to adjust the brightness of *a particular image* through variation of integration periods. Appx1257-1258; Opening Br. at 23, 9-10, 13-14. It is uncontested, however, that *Tomoyasu* discloses a CCD device with a destructive readout—meaning that multiple images would have to be taken with the user continuously adjusting the integration time *in different images* until the desired brightness is found. USPTO completely fails to address the "an image" language of the time select switch which requires that the function of selectively varying integration periods operates on the

same image—not different image—a point expressly made in the specification of the '740 Patent that excludes CCD imaging devices from use with the claimed time select switch, such as *Tomoyasu*. Thus, *Tomoyasu* cannot satisfy the remote time select switch limitation.

Third, the express claim language discloses a time select switch that is "remote from said first circuit board for selectively varying integration periods to produce an image of a desired brightness." Appx63-64 ('740 Patent at Claims 1, 2). Not only did Cellect argue in the proceedings below (contrary to USPTO's misstatement) that Tomoyasu's AGC knob does not satisfy this limitation because it adjusts voltage, not integration periods, but the undisputed evidence confirms that the circuitry and function for adjusting image brightness in Tomoyasu is located on the same first circuit board as image processor, rather than being remote from the the first circuit board. USPTO merely repeats the Board's erroneous findings without disputing the substance of Cellect's argument demonstrating that the Board lacked substantial evidence for its finding that Tomoyasu's AGC knob satisfies the remote time select switch limitation.

Thus, the Board's decision should be vacated and reversed.

ARGUMENT

I. USPTO'S RESPONSE FAILS TO JUSTIFY THE ERRONEOUS CLAIM CONSTRUCTION FOR TIME SELECT SWITCH ADOPTED BY THE BOARD THAT WARRANTS REVERSAL

USPTO's Response fails to substantively address the dispositive claim construction issue on appeal—the express claim language for a time select switch "remote from said circuit board for selectively varying integration periods to produce an image of a desired brightness." USPTO repeatedly parrots statements by the Board (*see*, *e.g.*, USPTO Br. at 15-16, 22-24), but fails to rebut Cellect's arguments, grounded in the intrinsic record, that the claim language, on its face and as described in the '740 Patent specification and prosecution history, means that the remote time select switch limitation includes the function of selectively varying integration periods for a particular image. Opening Br. at 22-28. As properly construed, the challenged claims are patentable and the Board's opinion should be vacated and reversed.

USPTO and amici curiae Samsung repeatedly attack Cellect by mischaracterizing, and even mistating, the record. For example, USPTO and Samsung argue that Cellect specifically requires circuit 318 as part of the construction of time select switch. USPTO Br. at 21-22; Samsung Br. at 2-4. The record below and Cellect's Opening Brief, however, demonstrate Cellect's actual position—that Cellect correctly, and consistent with the patent claim language and

specification, argued that the time select switch requires circuitry for selectively varying integration periods as that function is expressly recited in the claims ("time select switch . . . for selectively varying integration periods"). Appx1259-1260 ("The 'time select switch' must include the functionality to vary the integration period . . ."); Appx1262 ("In particular, the '740 Patent specification specifically illustrates that 'remote' means a separate circuit board with its own circuitry (e.g. imager read/out clock select circuitry 318) for varying the integration period with remote time select switch 320."); Opening Br. at 3 ("First, the Board erred by construing the term 'time select switch . . . for selectively varying integration periods' as not requiring the associated circuitry that functions to allow the variation of integration periods.").\(^1\)

As these portions of the record on appeal confirm, although Cellect also noted that circuit 318 is the example provided in the '740 Patent that performs the "selectively varying integration periods" function of the time select switch, Cellect did not require circuit 318 as part of the construction. USPTO's atttempt to limit

_

¹ See also Opening Br. at 5 ("Did the Board err by disregarding the plain meaning of the claims in light of the claim language and specification that require the claimed 'time select switch . . . for selectively varying integration periods' to include the circuitry that performs the function of varying integration periods (which is what makes the switch a 'time select switch . . . for selectively varying integration periods')?"); *id.* at 10 ("Thus, the claimed remote time select switch for selectively varying integration periods includes circuitry that allows the user to vary the charge integration period.").

Cellect to a preferred embodiment when Cellect explains the meaning of time select switch based on the specification description of the term (Opening Br. at 11-13) is improper. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005) ("For instance, although the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments."). Even this argument by USPTO, though, misses the mark as circuit 318 in the specification is described as a circuit capable for performing the function of selectively varying the integration period and would be so understood by a person skilled in the art—USPTO concedes this point as it was never addressed. Therefore, the construction of time select switch includes the function of a circuit for selectively varying integration periods.

In contrast to Cellect's position for the time select switch that is based on and supported by the intrinsic record, USPTO reads the claim language in a manner that ignores the express terms in the claim and is inconsistent with the specification that describes the meaning of the time select switch. USPTO Br. at 21-24.

Because the intrinsic record supports that the remote time select switch include the function of selectively varying integration periods, USPTO's arguments fail and the Board's Decision should be vacated and reversed under this Court's de novo standard of review. *Phillips*, 415 F.3d at 1313 (terms must be read "not only in the context of the particular claim in which the disputed term appears, but in the

context of the entire patent, including the specification" and "prosecution history") (citations omitted).

A. Selectively Varying Integration Periods Means Selectively Varying Integration Periods

USPTO justifies the Board's erroneous construction of time select switch by arguing that the expressly recited feature of the switch for "selectively varying integration periods" does not mean exactly what it says, but is importing limitations from the specification into the claims by requiring circuitry for this feature. USPTO Br. at 21; *see also* Samsung Br. at 5-8. USPTO's reasoning is wrong for multiple reasons.

First, the plain language of the Asserted Claims expressly recites that the function of the claimed time select switch is to selectively vary integration periods to produce an image of desired brightness. Appx64 ('740 Patent at Claims 1, 2). USPTO concedes that this function is required by the claims. USPTO Br. at 22 (admitting Claim 1 of the '740 Patent "requires the first function" of "allow[ing] a user to manually select the time and, thus, vary an integration period"). Having admitted this language of the claim, USPTO cannot justify the Board's construction which completely fails to address whether the time select switch can perform the very function that makes it the recited time select switch. Opening Br. at 22-23.

USPTO's approach violates the principles of claim construction which require claims should be construed to give effect to all terms in the claim, as explained in

Cellect's Opening Brief, which USPTO did not rebut. *Id.* at 23 (citing *St. Jude Med.*, *LLC v. Snyders Heart Valve LLC*, 977 F.3d 1232, 1241 (Fed. Cir. 2020) (stating it is "highly disfavored to construe terms in a way that renders them void, meaningless, or superfluous."); *Akzo Nobel Coatings, Inc. v. Dow Chem. Co.*, 811 F.3d 1334, 1339-40 (Fed. Cir. 2016) (finding improper construction that rendered claim term superfluous)).

Second, USPTO's arguments that the '740 Patent claims do not recite the word "circuitry" in the time select switch limitation and that Cellect is "conflat[ing]" functions are red-herrings, as well as substantively incorrect. USPTO Br. at 21-22. It remains undisputed that the '740 Patent claims explicitly recite the function of selectively varying integration periods, which is accomplished as part of the remote time select switch element. Appx64 ('740 Patent at Claims 1, 2). Cellect's position is exactly that—namely, that the Board erred in failing to construe the time select switch to include performance of the claimed function of selectively varying integration periods. Moreover, Cellect's construction is entirely consistent with and gives meaning to the entirety of the claims' language and, as a result, the Board erred in adopting a contrary construction. St. Jude Med., LLC, 977 F.3d at 1241 (declining to construe terms based on embodiments that rendered claim terms superfluous) (internal citations omitted).

In addition, USPTO's "red herring" argument fails because USPTO confuses the issue by bringing in performance of the actual integration of the image—which is not claimed as part of the time select switch. Nor has Cellect argued that actual integration is performed by the time select switch. Rather, selectively varying the integration periods is claimed and is the function performed by the time select switch.

Third, USPTO does not dispute that every embodiment in the '740 Patent specification describes and depicts the time select switch as including associated circuitry for performing the variation of integration periods. Opening Br. at 24-27 (citing, e.g., Appx56 ('740 Patent at 5:54-6:43), Appx41-42, Appx52-53 at Figs. 4, 4a, 9, 10, Appx63 at 19:37-57); see also USPTO Br. at 22. Nor does USPTO dispute controlling Federal Circuit precedent that claims should be construed consistent with the patent specification. Opening Br. at 25 (citing In re Smith Int'l, Inc., 871 F.3d 1375, 1382-83 (Fed. Cir. 2017) (claims are to be read in light of the specification); accord Profectus Tech. LLC v. Huawei Techs. Co., 823 F.3d 1375, 1380 (Fed. Cir. Indeed, USPTO leaves entirely unrebutted Cellect's detailed 2016) (same). explanation of why the Board's interpretation of the specification as disclosing "basic . . . circuitry" or interpreting the figures is incorrect. Opening Br. at 26-27. This is critical because USPTO cannot rebut the Board's error of interpreting the specification in an overly simplisitic manner when, in fact, the embodiments confirm

that circuitry of the time select switch performs the claimed function of selectively varying integration periods.

Because USPTO is unable to reconcile the Board's conclusions with the technical disclosures of the specification, USPTO resorts to merely repeating, without analysis, the Board's erroneous conclusions and broadly claiming that Cellect is attempting to read the embodiments into the claim language. USPTO Br. at 24; see also Samsung Br. at 7-8. USPTO and Samsung are incorrect. In fact, Cellect reads the claim language in light of and consistent with the specification, which is what the aforementioned Federal Circuit precedent mandates. St. Jude Med., LLC, 977 F.3d at 1241 ("Claims are interpreted with an eye toward giving effect to all terms in the claim.") (citation omitted).

USPTO relies on inapposite cases (USPTO Br. at 22-23; *see also* Samsung Br. at 7-8) that discuss claim disavowal where a patentee attempted to use the specification to argue that the invention does not include a particular feature, "even though the language of the claims, read without reference to the specification, might be considered broad enough to encompass the feature in question." *Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1366-67 (Fed. Cir. 2012) (finding no disavowal where specification never uses word patentee sought to construe); *Continental Circuits LLC v. Intel Corp.*, 915 F.3d 788, 798 (Fed. Cir. 2019) (finding preferred embodiment description did not amount to disavowal of claim scope); *GE*

Lighting Sols., LLC v. AgiLight, Inc., 750 F.3d 1304, 1310 (Fed. Cir. 2014) ("This is simply not a case where the patentee has disavowed the plain meaning of the term IDC connector."); Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 906 (Fed. Cir. 2004) (declining to limit claim scope to preferred embodiment).

Those cases are entirely different than the circumstances here, where the embodiments in the specification confirm the claim language that integration periods are selectively varied by circuitry of the time select switch to enhance image quality. Appx56 ('740 Patent at 5:28-34) ("For each of the embodiments, selected charge integration periods may be used to enhance the image to a desired brightness or intensity."); Appx62-63 at 18:49-19:36, Appx52 at Fig. 9 ("As seen in FIG. 9, the intensity or brightness of an image may be enhanced by a CMOS-CID imager which has a variable charge integration capability.").

Thus, the plain language of the challenged claims and the specification confirm that the meaning of the remote time select switch includes circuitry that allows for selectively varying integration periods as expressly recited.

B. USPTO Repeatedly Mischaracterizes The Record Below Where Cellect Consistently Argued that the Time Select Switch Limitation Includes Circuitry for Selectively Varying Integration Periods

USPTO and amicus curia Samsung repeatedly mischaracterize and omit relevant portions of the record below to manufacture an argument that Cellect has been inconsistent about the meaning of time select switch. USPTO Br. at 24-25;

Samsung Br. at 2-4. As explained in Cellect's Opening Brief (Opening Br. at 27-28) and further below, the record demonstrates that Cellect argued before the district court, the PTAB and the Central Reexamination Unit that the time select switch includes circuitry for selectively varying integration periods, as recited in the claims. Each of USPTO's meritless arguments to the contrary should be rejected. USPTO Br. at 24-25.

USPTO incorrectly argues that the Cellect's proposed construction in its Patent Owner Response that used the word "feature for selectively varying integration periods to produce an image of desired brightness" is not the same as specifically proposing that circuitry 318 is covered by the construction. USPTO Br. at 24; see also Samsung Br. at 2-4. As an initial matter and as explained above, USPTO distorts the record and Cellect's position, which is not that circuit 318 is required for the construction of time select switch, but that circuitry for selectively varying integration periods is required. Opening Br. at 24-25 (explaining the exemplary circuitry associated with the time select switch, including circuitry 318) (citing Appx56 ('740 Patent at 5:54-6:43), Appx41-42, Appx52-53 at Figs. 4, 4a, 9, 10). Aside from mischaracterizing Cellect's position, USPTO cites nothing other than Cellect's proposed construction in a vacuum. USPTO Br. at 24.

For example, USPTO and Samsung ignore the fact that Cellect's proposed construction before the district court used the "feature" language because

defendants' proposal, which limited the term "time select switch" to only a "switch," was too narrow. Opening Br. at 27-28 (citing Appx1209-1210). In fact, Cellect purposefully used the word "feature" to encompass more than a mere switch, but to include the feature for selectively varying integration periods. Appx1209-1210. Accordingly, Cellect's use of "feature" was to capture the key functional element of selectively varying integration periods and the circuitry, as well as other components, such as knobs and screens, needed to perform the function—consistent with Cellect's position regarding the time select switch in reexamination. Appx1168-1169 (explaining the functionality of the associated circuitry is a component of the time select switch). This is confirmed by the quotes provided in Cellect's Opening Brief where the Examiner summarized Cellect's arguments that a POSITA would understand a time select switch as including circuitry, and that the time select switch cannot work without the readout clock select circuitry. Opening Br. at 27-28 (citing Appx1247); see also Appx1168 ("[T]he Specification of the '740 Patent explains that the time select switch 45 cannot work without the readout clock select circuitry 318 which is must be remote from the first circuit board.") (original emphasis omitted).

USPTO's suggestion that Cellect did not advance during the IPR proceedings its argument that a POSITA would understand a time select switch as including circuitry is demonstrably incorrect. USPTO Br. at 24-25. Cellect included in its

Preliminary Response during the IPR proceedings for the '740 Patent the exact same sentence it included in its Opening Brief on appeal, specifically: "[A] POSITA would understand that the '693 Patent [the '740 Patent's Parent] describes a remote switch, including circuitry that can be used to select a desired frequency, for selectively varying integration periods to produce an image of desired brightness[.]" Appx1815; Opening Br. at 15 (quoting Appx1247).

Ironically, Cellect notes that it was the Examiner during reexamination, and not Cellect, that changed positions regarding the remote time select switch limitation to the detriment of Cellect. As explained in Cellect's Opening Brief, and not disputed by USPTO, the Examiner in its First Advisory Action agreed with Cellect on the very technical issues raised in this appeal. Opening Br. at 16-17. Specifically, the Examiner initially stated "the Examiner agrees that claim 1 (under the purview of 112 6th paragraph) requires the structure corresponding to circuitry 318 since it is used to perform the claimed function and that these circuitry elements must be remote from the claimed first circuit board." Appx1183. In light of the Examiner's decision, Cellect cancelled Claim 13, which is not at issue on this appeal and does not include the same "time select switch . . . for selectively varying integration periods" language. *Id.*; see also Appx1199-1200. It was only after Cellect cancelled Claim 13 for expediency purposes that the Examiner, sua sponte, reversed course to determine that Claim 1 does not require circuitry 318, and ultimately rejected Claims

1 and 2. Appx1209-1210. Thus, Cellect has been harmed by the Examiner's shifting positions regarding the remote time select switch.

II. USPTO'S RESPONSE DOES NOT JUSTIFY THE BOARD'S OBVIOUSNESS FINDING OVER *TOMOYASU* BASED ON AN INCORRECT CLAIM CONSTRUCTION

There are two elements of the time select switch that *Tomayasu* fails to disclose: (1) remote functionality for selectively varying the integration periods, and (2) achieving desired brightness by selectively varying the integration period for "an image."

As Cellect explained in its Opening Brief, the Board's obviousness conclusion is premised on its flawed construction of the remote time select switch limitation that did not include associated circuitry for selectively varying integration periods. Opening Br. at 30-35. Thus, to the extent this Court, under its de novo review, agrees and vacates the Board's construction, then the Board's obviousness conclusions, which depend on that erroneous construction, should necessarily be vacated and reversed. Moreover, USPTO failed to rebut that the Board's obviousness conclusions are not supported by substantial evidence.

A. USPTO Admits that *Tomoyasu* is a CCD Device and Thereby Concedes that *Tomoyasu* Cannot Teach or Suggest a Remote Time Select Switch that Varies Integration Periods to Improve the Quality of the Same Image

The '740 Patent specification expressly describes the advantage of the time select switch implemented in CMOS and CID imaging devices to obtain benefits not

possible with CCD imaging devices, such as *Tomoyasu*. Opening Br. at 9-10, 13-14; Appx56 ('740 Patent at 5:35-6:5).²

As Cellect explained in its Opening Brief, the '740 Patent discloses and claims a CMOS-CID device that allows a user to vary the integration period of "an image" to enhance the brightness of that image. Opening Br. at 9-10 (emphasis added); see also Appx63-64 ('740 Patent at Claims 1, 2) ("a time select switch... for selectively varying integration periods to produce an image of a desired brightness, said switch having a plurality of settings enabling selective control to produce the image of a desired brightness") (emphasis added); id., Appx36 at Abstract ("The imaging device can be defined as a CMOS-CID device wherein a user may select an appropriate integration period in order to enhance the viewed image to a desired level of brightness.") (emphasis added); id., Appx56 at 5:28-30 ("For each of the embodiments, selected charge integration periods may be used to enhance the image to a desired brightness or intensity.") (emphasis added).

²

² USPTO's attempt to draw comparisons between the '740 and '839 Patents trivializes the significance and importance of the entire remote time select switch claim element, which USPTO concedes did not exist in the '839 Patent. USPTO Br. at 5-6, 11-12. The fact that the '740 and '839 Patents share some commonality is irrelevant to the unique claim requirement found only in the '740 Patent requiring a time select switch for selectively varying integration periods that is remote from other circuitry—a critical aspect of the invention of the '740 Patent and differentiates it over the '839 Patent and the prior art. Appx63-64 ('740 Patent at Claims 1, 2).

The ability to modify the brightness of a particular image, as recited in the challenged claims, is different from other approaches where brightness for a particular image cannot be varied. In particular, the '740 Patent specifically explains that CCD devices could *not* perform this function as CCD devices employ a destructive readout where multiple images are taken with the user continuously adjusting the integration time *in different images* until the desired brightness is found. Opening Br. at 9-10; Appx56 ('740 Patent at 5:35-65). Accordingly, a person skilled in the art would understand that the "imaging device" in claim 1 is a CMOS-CID device and claim 2 further limits the imaging device to CMOS—not a CCD imaging device like *Tomoyasu*. Appx36 ('740 Patent at Abstract), *id.*, Appx56 at 5:35-6:61, Appx64 at Claim 2.

USPTO concedes "the charge is destroyed upon readout" during operation of CCD devices (USPTO Br. at 3 (citing Appx56 at 5:52-53); *id.*, at 7 (citing Appx1774 at ¶ 9; Appx1775 at ¶ 14)), but argues, incorrectly, that *Tomoyasu*'s Gain Control Knob (23) allows for the selective adjustment of integration periods (which, as explained in more detail below, is incorrect). USPTO Br. at 7-10. However, notwithstanding the lack of merit of this argument, it remains undisputed that any adjustment to brightness in a CCD device such as *Tomoyasu* cannot be used *for the same* image, but the brightness of one image is used to make adjustments *for the next image*, which does not satisfy the claim language. For example, using

Tomoyasu's CCD-based integration approach, multiple images would be required, each adjusted relative to the prior image, to achieve the desired brightness. In contrast, using the claimed CMOS-CID approach, the desired brightness is achieved in the same image that is selectively adjusted until the desired brightness is achieved.

In other words, under the approach disclosed in *Tomoyasu*, if a user is unhappy with the brightness of an image, that image is discarded and an adjustment is made *on the next image*. Appx1257-1258; Opening Br. at 23, 9-10, 13-14. This process repeats over and over until the desired brightness is achieved described above. Based on the USPTO's own admission, the destructive readout feature of CCD devices such as Tomoyasu is exactly not the claimed time select switch. USPTO Br. at 3 ("In CCD imagers, the charge is destroyed upon readout."). As a result, *Tomoyasu* cannot teach or suggest the time select switch of the '740 Patent. Further, USPTO fails to explain how a CCD device like *Tomoyasu* can satisfy claim 2 which further limits the imaging device to a CMOS device—not a CCD device like *Tomoyasu* which cannot selectively vary the integration of "an image."

Thus, the *Tomoyasu* CCD imager is fundamentally different from the invention disclosed in the '740 Patent, whereby the user utilizes the time select switch to selectively adjust the integration period until a desired brightness is achieved *for a particular image*. As a result, even under the Board's and USPTO's flawed reasoning, *Tomoyasu* does not satisfy the claimed remote time select switch.

This distinction is critical and dooms the Board's finding (advanced by USPTO and amicus curiae Samsung on appeal) that the Gain Controlling Knob (23) of *Tomoyasu*—which only adjusts integration period *for a different image*—somehow satisfies the remote time select switch claim limitation.

B. The Board's Obviousness Conclusion is Not Supported by Substantial Evidence

USPTO is incorrect that substantial evidence supports that the Board's finding that *Tomoyasu's* gain control knob and integration priority switch satisfy the '740 Patent claims. *Id.* at 9-10, 25-28.

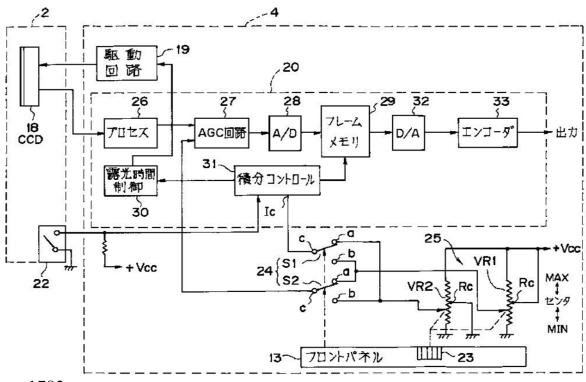
The Board lacked substantial evidence for its finding that *Tomoyasu*'s gain control knob satisfies the remote time select switch limitation. USPTO argued the knob adjusts the sensitivity of an imager through its integrating function by changing the time over which the image is integrated, through changing the electronic charge accumulating time. *Id.* at 8-9, 25-26. However, adjusting voltage levels, which is what *Tomoyasu* discloses, is not the same as selectively adjusting integration periods as required by the claims.

Contrary to USPTO's assertion that Cellect is raising new arguments (USPTO Br. at 27-28), Cellect argued during reexamination in response the original office action that *Tomoyasu*'s gain control knob is nothing more than a knob with variable resistors that varies voltage levels, not integration periods—which is the same argument Cellect advances on appeal and even cites the same Figure 3 of *Tomoyasu*.

Compare Opening Br. at 30 ("The Gain Controlling Knob (23), however, is nothing more than a knob, as can be seen below in Tomoyasu Figure 3 where the knob 23 [] is not connected to any circuitry for varying integration periods. At most, [gain control] knob 23 (with variable resistors) merely varies voltage levels—not integration periods.") (citing Appx1777) with Appx779 ("In Tomoyasu, the control knob is just that, a knob with no supporting circuitry for varying the integration periods. The AGC circuit 27 in Tomoyasu, which performs the actual 'varying' of the integration period, is not remote from the first circuit board, but in fact is located on the first circuit board, as shown in Figure 3 of Tomoyasu. Further, control knobs S1 and S2 are simply switches connected variable resistors (VR) that communicate with the AGC circuit 27 on the first circuit board.") (emphases added).

Following Cellect's remarks, the Examiner allowed the claims, which Cellect subsequently withdrew, as explained above (Section I.B). *See* Appx1183, Appx1199-1200, Appx1209-1210. In fact, the "Examiner [found] Patent Owner's arguments with respect to claims 1 and 2 to be persuasive and therefore, the rejection to those claims under obvious [sic] type double patenting [was] withdrawn." Appx1185. Thus, the Board had an opportunity to consider Cellect's positions and USPTO's arguments that Cellect somehow forfeited this argument are incorrect. USPTO Br. at 27.

The Board also lacked substantial evidence for its finding that the gain control knob is remote because the knob is placed on the front panel of the CCU remote from the signal processing unit. *Id.* at 7-10, 26. The components of *Tomoyasu* that USPTO and the Board assert satisfy the claimed time select switch (i.e., the gain control knob and integration priority switch) are not remote from the "first circuit board," as required by the '740 Patent claims. Indeed, Figure 3 of *Tomoyasu* confirms that these components (i.e., Automatic Gain Control (AGC) circuit 27, Exposure Time Control circuit 30 and Integration Control circuit 31)) (collectively referred to as "integration time select circuits") are not remote from the first circuit board 20, but in fact are located on the first circuit board with the image processing circuitry 26:



Appx1783.

Finally, USPTO's waiver argument misses the mark. USPTO Br. at 28-29. The Board's new reasoning was in the context of a construction that neither the Board nor the Examiner adopted (i.e., "even if claim 1 were construed to require varying the actual integration period independent of the AGC circuit, such would have been obvious in light of Tomoyasu teaching it was known for a still image to 'extend[] the integration time of the image sensor' with 'little negative effect on the S/N of the image.""). Appx22 (emphasis added). This fails to address that Tomoyasu is a CCD device that cannot selectively vary integration periods for a particular image as the claims require.

CONCLUSION

Cellect respectfully requests that the Court reverse the Board's Decision on Appeal and find patentable Claims 1 and 2 of the '740 Patent.

Respectfully submitted,

Dated: September 15, 2022 By: /s/Paul J. Andre

Paul J. Andre
James R. Hannah
Kramer Levin Naftalis
& Frankel LLP
333 Twin Dolphin Dr., Suite 700
Redwood Shores, CA 94065
Tel: 650.752.1700
pandre@kramerlevin.com
jhannah@kramerlevin.com

Jonathan Caplan
Jeffrey Price
Kramer Levin Naftalis
& Frankel LLP
1177 Avenue of the Americas
New York, NY 10036
Tel: 212.715.7502
jcaplan@kramerlevin.com
jprice@kramerlevin.com

Attorneys for Appellant Cellect, LLC

CERTIFICATE OF COMPLIANCE WITH RULE 32(B)

1. This brief complies with the type-volume limitation of Fed. Cir. R.

32(b) because this brief contains 4,791 words, exclusive of the certificate of

interest, table of contents, table of citations, and this certificate of compliance as

exempted by Fed. R. App. P. 32(f) and Fed. Cir. R. 32(b).

2. This brief complies with the typeface requirements of Fed. R. App. P.

32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because this

brief has been prepared in a proportionally spaced typeface using Microsoft Word

2019 in Times New Roman 14 point font.

Dated: September 15, 2022 /s/ Paul J. Andre

Paul J. Andre

Attorneys for Appellant, Cellect, LLC