UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/842,581	03/15/2013	Shoichi HAGISAWA	091493-0016	3068

20277 7590 01/06/2020

MCDERMOTT WILL & EMERY LLP
THE MCDERMOTT BUILDING
500 NORTH CAPITAL STREET, N.W.
WASHINGTON, DC 20001

EXAMINER
STORK, KYLE R

ART UNIT	PAPER NUMBER
2144	

NOTIFICATION DATE	DELIVERY MODE
01/06/2020	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocketmwe@mwe.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte SHOICHI HAGISAWA, GO DOJO, and HIDEO SANO

Appeal 2019-001134
Application 13/842,581
Technology Center 2100

Before MICHAEL J. STRAUSS, JEREMY J. CURCURI, and AMBER L. HAGY, *Administrative Patent Judges*.

HAGY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant[1] appeals from the Examiner's decision to reject claims 1–8 and 11, which are all of the pending claims. Final Act. 2; Appeal Br. 1–2. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

---

[1] We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party in interest as the applicant, PFU Limited. Appeal Br. 1.

CLAIMED SUBJECT MATTER

According to Appellant, the application describes and claims a "document creation system, a document creation device, and a computer readable medium." Spec. p. 1, ll. 11–12. In particular, Appellant's Specification describes a "form processing device" that includes a "form definition information conversion unit" so that "relevant form image may be displayed" based on "form definition information." *Id.* According to one aspect, a "document creation device" includes "functional layer storage that stores functional layers which are to be superposed on an image . . . and whose functions are defined in predetermined regions of the layers . . . ." *Id.* As illustrated by a flowchart in Figure 4, the system scans an image, selects image data, then defines functions in a template layer with reference to the scanned image, and then consolidates the image data and template layer. Spec. p. 10, l. 23 – p. 12, l. 9, Fig. 4. As part of defining functions in the template layer, the system adds, *inter alia*, "input acceptance definition information." *Id.* at p. 11, ll. 19–25.

Claims 1 and 11 are independent. Claim 1, reproduced below with disputed limitation italicized, is illustrative of the claimed subject matter:

> 1. A document creation system comprising a document creation device and a document browsing device,
>
> wherein the document creation device which is a computer, has a functional layer storage that stores functional layers which are to be superposed on image data, which are transparent at least partially, and whose functions are defined in predetermined regions of the layers,
>
> the document creation device is programmed to perform as a selection section that selects the functional layer to be

applied, from among the functional layers stored in the functional layer storage,

an edit section that edits the functional layer selected by the selection section, and

a synthesis section that superposes the edited functional layer selected by the selection section onto the image data to synthesize a consolidated document file in which the image data and the functional layer are consolidated,

one of the defined functions of the functional layers is an input acceptance function which specifies a region in the functional layer, and a type of an input operation including key input, handwritten input, selection, or image insertion to be accepted in this region, or a file control function which specifies a transfer destination of the file as a whole, an output destination of the file, or addition of security to the file,

the edit section changes a region in which a function is defined on the selected functional layer, and

the document browsing device which is a computer programmed to perform input acceptance processing, or output processing, on the image data onto which the functional layer is superposed by the synthesis section in accordance with the superposed functional layer of the consolidated document file if the consolidated document is opened by the document browsing device.

REFERENCES

The prior art relied upon by the Examiner is:

Tillberg et al. ("Tillberg")	US 2007/0168382 A1	July 19, 2007
Imamoto	US 2009/0089661 A1	April 2, 2009
Bottomley	WO 2010/141748 A1	June 3, 2010
Hatzav et al. ("Hatzav")	US 2011/0128360 A1	June 2, 2011
Natarajan	US 2012/0257249 A1	Oct. 11, 2012

REJECTIONS[2]

Claims 1–3, 5, 8, and 11 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Hatzav, Tillberg, and Natarajan. Final Act. 2–15.

Claims 4 and 6 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Hatzav, Tillberg, Natarajan, and Bottomley. Final Act. 15–19.

Claim 7 stands rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Hatzav, Tillberg, Natarajan, and Imamoto. Final Act. 19–21.

[2] The Leahy-Smith America Invents Act ("AIA") included revisions to 35 U.S.C. § 103 that became effective on March 16, 2013. Because the present application was filed before March 16, 2013, the Examiner applies the pre-AIA version of the statutory basis for unpatentability. *See* Final Act. 2 (applying "pre-AIA 35 U.S.C. 103(a)").

OPINION

We have considered Appellant's arguments and contentions (Appeal Br. 5–15; Reply Br. 5–7)[3] in light of the Examiner's findings and explanations (Final Act. 2–21; Ans. 3–5). For the reasons set forth below, we AFFIRM.[4]

The Examiner relies on the combined disclosures of Hatzav, Tillberg, and Natarajan as teaching or suggesting the limitations of claim 1. Final Act. 2–9. In particular, the Examiner finds Hatzav discloses a "document creation system" comprising a "document creation device" and a "document browsing device," as recited, as well as the recited "functional layer storage" limitation, and the "selection section," "edit section," and "synthesis section" limitations. *Id.* at 2–4. The Examiner acknowledges, however, that Hatzav does not disclose "one of the defined functions of the functional layers is an input acceptance function or a file control function" or the "edit section" limitations, but relies on Tillberg in combination with Hatzav as disclosing those limitations. *Id.* at 4–8. The Examiner also acknowledges Hatzav and Tillberg do not explicitly disclose the "consolidated" limitations, but relies on Natarajan in combination with Hatzav and Tillberg for those limitations. *Id.* at 8–9.

---

[3] Only those arguments made by Appellant have been considered in this decision. Arguments Appellant did not make are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

[4] Appellant's argument with regard to independent claim 11 merely repeat the arguments raised for claim 1. *Compare* Appeal Br. 10–15 (arguments for claim 11), *with id.* at 5–10 (arguments for claim 1). Appellant argues dependent claims 2–8 collectively with claim 1. *See id.* at 10. Therefore, based on Appellant's arguments, we decide the appeal of claims 1–8 and 11 based on claim 1 alone. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Appellant does not take issue with the Examiner's findings regarding Hatzav or Natarajan, or with the Examiner's findings regarding a motivation to combine all three references (*see* Final Act. 9–11). Rather, Appellant focuses its arguments on appeal on the assertion that

> [n]one of the cited references teaches that *one of the defined functions of the functional layers is an input acceptance function which specifies a region in the functional layer, and a type of an input operation including key input, handwritten input, selection, or image insertion to be accepted in this region, or a file control function which specifies a transfer destination of the file as a whole, an output destination of the file, or addition of security to the file*, as required by claim 1.

Appeal Br. 5 (emphasis added). The primary basis of Appellant's argument is that "Tillberg teaches a document analysis system where information is *electronically extracted* from fields within documents by comparison to a template library, identification of data fields based on size and position, extraction of data from the fields, and application of recognition." *Id.* at 6 (emphasis added). Appellant contends, because "Tillberg is directed to *extracting data from an existing form*," it does not teach "a *type of an input operation* including key input, handwritten input, selection, or image insertion to be accepted in the specified region," as claimed. *Id.* at 8 (emphases added). Appellant further contends "persons experienced in the field of document creation systems know that a *method for data extraction from an existing document* differs from an *input acceptance function* which specifies a region in the functional layer, and a type of an input operation including key input, handwritten input, selection, or image insertion to be accepted in this region." *Id.* at 8–9 (emphases added) (citing Evidence Appendix).

> The Examiner responds, finding
>
> > Hatzav teaches overlaying a template (functional layer) on a scanned document and secondary reference Tillberg teaches identifying a template (functional layer) for a scanned or input document and extracting data from the document. In Tillberg [0074] the template is identified for the scanned image and the fields within the identified scanned images are mapped.

Ans. 3–4. The Examiner further determines that "[t]he claim specifically states that the input acceptance function specifies a region and a type of input operation," and finds Tillberg "specifies a field and the type of input operation expected in the field." *Id.* at 4 (citing Tillberg ¶ 77). In particular, the Examiner finds Tillberg discloses "manual, automated, or semi-automated methods of identifying fields (region) within templates," wherein "[t]he user is able to specify a field (region) within the template and a type of an input operation can be provided as metadata." *Id.* The Examiner finds this discloses a "type of input [] operation" because "[t]he metadata can specify name of the field [and] the *type of data expected within the field*," such as "a mark (selection), text (key input), handwriting or an image (image insertion), and, optionally, other information, such as whether or not the field has specific security or access levels." *Id.*

Appellant asserts the Examiner's findings are premised on an unreasonable construction of "input operation." Appeal Br. 8. We find this argument unpersuasive. It is well settled that the terms of a claim must be given the broadest reasonable interpretation, consistent with Appellant's Specification, as they would be interpreted by one of ordinary skill in this art. *In re Morris*, 127 F.3d 1048, 1054–55 (Fed. Cir. 1997); *In re Zletz*, 893 F.2d 319, 321–22 (Fed. Cir. 1989). Appellant asserts that, according to the "broadest reasonable interpretation," an "input acceptance function" would

not include "data extraction from an existing document." Appeal Br. 8–9. We disagree. The claim refers to a "type of an input operation including key input, handwritten input, selection, or image insertion to be accepted in this region." The Specification further states that the "input acceptance definition information that causes the input acceptance function to be performed *contains a region in the template layer* and the *definition information* which specifies a *type of the input operation accepted in this region in response to a user instruction*." Spec. 7. Nothing in the claim or the Specification excludes data input through a scanning function. Indeed, the claims do not recite a step of actually inputting the data, and thus are not restrictive in that regard. Rather, the claims recite specifying "a region in the functional layer" and "a type of an input operation . . . to be accepted in this region."

We agree with the Examiner's finding that, affording claim 1 its "broadest reasonable interpretation," Tillberg teaches or suggests the disputed limitation, including an "input acceptance function which specifies a region in the functional layer, and a type of input operation including key input, handwritten input, selection, or image insertion to be accepted in this region . . . ." Final Act. 5–7; Ans. 3–5. Tillberg discloses a document analysis system in which templates are established by, for example, scanning documents, such as existing blank paper forms. Tillberg ¶¶ 74–75. The "input scans are then 'Fingerprinted', i.e. compared against the dictionary of templates, in order to identify the type of form 215." *Id.* at ¶ 74. The fields within the identified scans are mapped. *Id.* In a manual mode, a user may "draw rectangles around fields in the template using a mouse or keystrokes or a combination of both." *Id.* ¶ 77. "In addition, those identified fields are

provided with metadata, including, but not limited to the name of the field, *the type of data expected within the field,* such as-a mark, *text, handwriting or an image*, and, optionally, other information, such as whether or not the field has specific security or access levels." *Id.* (emphases added). Tillberg further states that once the fields have been defined, "[t]he resulting *defined fields and parent forms* are then stored in a database as a *defined template*." *Id.* ¶ 100.

Thus, as the Examiner finds, and we agree, Tillberg discloses specifying a "region in the functional layer," by creating templates that contain defined fields that are mapped to regions on, e.g., a blank form. Tillberg ¶¶ 74–77, 100–102. Tillberg also discloses that the "input acceptance function" specifies "a type of an input operation including key input, handwritten input, selection, or image insertion to be accepted in this region," as claimed here, by describing that the defined fields "are provided with metadata" that includes "the type of data expected within the field." *Id.* ¶ 77. The type of data to be expected includes "a mark, text, handwriting or an image . . . ." *Id.* Thus, Tillberg discloses an input acceptance function that specifies both a "region" (defined field) as well as a "type of input operation" (type of data to be expected within the field, such as text or handwriting).

Appellant's challenge to the rejection appears to be based on the premise that the claims require prospective user input, and cannot include extracting data from an existing form. *See* Appeal Br. 8. As support for this view of the claims, Appellant relies on a document Appellant provides in an Evidence Appendix, entitled "Use Smart Documents." *Id.* at 9; Evidence Appendix. Appellant asserts this document is evidence of what the

ordinarily skilled artisan would understand in differentiating an "input acceptance function" from a "method for data extraction." *Id.* at 8. Appellant's argument is not persuasive, however, as Appellant does not (1) provide any information about the source of this document, such as its date and manner of publication; or (2) provide clear citations to portions of the document indicating where and how it describes an "input acceptance function" (a term that nowhere appears in this document, according to a key word search). The only portion quoted by Appellant describes "smart documents" as files that "are programmed to give you help as you work with them." Appeal Br. 9 (quoting Evidence Appendix, 1). Appellant does not, however, explain how such a "smart document" includes an "input acceptance function." For these reasons, Appellant's cited evidence is entitled to little, if any, weight.

Even assuming that Appellant's construction of "input acceptance function" were correct, we would not be persuaded of Examiner error in the rejection. As noted above, Tillberg discloses a system in which a "defined template" is created, such as from a blank form, in which fields in the form are defined by region and by type of input expected. Tillberg ¶¶ 74–77, 100–102. After that defined template is created, it may be used for scanning in completed forms, in which the defined fields are used to identify the incoming data from the scanned forms as, e.g., text (typewritten), handwriting, or an image. *Id.* ¶ 28. Thus, Tillberg does not disclose merely scanning documents, as Appellant suggests, but also discloses *creating the defined templates*, which may be created from a blank form and which include fields that use metadata to define the type of data to be expected in

that field when completed forms are later scanned. As such, Tillberg teaches or suggests the disputed limitation, as the Examiner finds.

Appellant does not present arguments regarding the other cited references, but states that "[t]he disclosures of Natarajan, Bottomley and Imamoto do not remedy the defects of Hatzav and Tillberg." Appeal Br. 9; Reply Br. 7. As noted above, Appellant argues only defects in the Examiner's findings regarding Tillberg and the disputed limitation. For the reasons stated above, we are not persuaded that those findings by the Examiner are defective.

In the event of further prosecution, we additionally point out potential issues regarding definiteness of the claims, under 35 U.S.C. § 112, second paragraph. In particular, the disputed limitation contains multiple "or" clauses, rendering the claim potentially unclear in terms of what recitation is an alternative to other recitations. We suggest that the claims would benefit from clarification, such as the use of numbers and corresponding formatting to indicate the main clauses. Although neither the Examiner nor Appellant addresses this point, it appears that the disputed limitation recites two primary alternatives, in which "one of the defined functions" is either (1) "an input acceptance function" (which specifies "a region in the functional layer" and "a type of input operation" as recited) or (2) "a file control function which specifies a transfer destination of the file as a whole, an output destination of *the file*,[5] or addition of security to the file" (emphasis

[5] We also note that this phrase lacks apparent antecedent basis; the previous reference to "file" in claim 1 is to "a *consolidated document* file." It is not clear if "the file" is intended to refer to "the consolidated document file" or to a different file. Because of the alternative nature of the recitations in the

added). The Examiner's findings regarding the teachings of Tillberg appear to be based on the first alternative, and the Examiner does not explicitly make findings that Tillberg discloses "a file control function." As these are (apparently) stated in the alternative, the Examiner need make findings on only one alternative, which (as discussed above), the Examiner has sufficiently done.

For the foregoing reasons, we are not persuaded of Examiner error in the rejection of claim 1 as unpatentable under 35 U.S.C. § 103(a) over Hatzav, Tillberg, and Natarajan, and we, therefore, sustain that rejection, along with the rejection of claims 2–8, argued collectively with claim 1, as well as the rejection of claim 11, for which Appellant repeats the arguments presented for claim 1.

CONCLUSION

The Examiner's decision rejecting claims 1–8 and 11 under 35 U.S.C. § 103(a) is AFFIRMED.

Claims Rejected	35 U.S.C. §	Basis/References	Affirmed	Reversed
1–3, 5, 8, 11	103(a)	Hatzav, Tillberg, Natarajan	1–3, 5, 8, 11	
4, 6	103(a)	Hatzav, Tillberg, Natarajan, Bottomley	4, 6	
7	103(a)	Hatzav, Tillberg, Natarajan, Imamoto	7	
Overall Outcome			1–8, 11	

claim, any uncertainty in the scope of this (non-argued) alternative does not affect our decision.

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