



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.
12/973,781	12/20/2010	Krishna YADAPPANAVAR	A517	2449
152569	7590	10/01/2020	EXAMINER	
Patterson + Sheridan, LLP - VMware 24 Greenway Plaza Suite 1600 Houston, TX 77046			GMAHL, NAVNEET K	
			ART UNIT	PAPER NUMBER
			2166	
			NOTIFICATION DATE	DELIVERY MODE
			10/01/2020	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):

- ipadmin@vmware.com
- psdocketing@pattersonsheridan.com
- vmware_admin@pattersonsheridan.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KRISHNA YADAPPANAVAR and SATYAM B. VAGHANI

Appeal 2019-002993
Application 12/973,781
Technology Center 2100

Before DEBRA K. STEPHENS, KARA L. SZPONDOWSKI, and
JOHN R. KENNY, *Administrative Patent Judges*.

STEPHENS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1–4 and 6–24. *See* Final Act. 1. 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. Appellant identifies the real party in interest as VMware, Inc. (Appeal Br. 3).

CLAIMED SUBJECT MATTER

The claims are directed to a method of compressing individual blocks of data associated with a file, into sub-blocks, according to a compression type (Abstract). Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method of storing compressed data within a file system, wherein data of files within the file system are stored in blocks and sub-blocks, said method comprising:
 - selecting a first block of data of a file within the file system for compression;
 - accessing a file descriptor of the file to identify an address of the first block of data, wherein the file descriptor of the file is stored in the file system separately from blocks and sub-blocks that store data of the file and contains references to the blocks containing uncompressed data and the sub-blocks containing compressed data of the file;
 - compressing the first block of data according to a first compression type;
 - allocating a first sub-block within the file system for storing the compressed first block of data;
 - storing the compressed first block of data within the first sub-block; and
 - updating the file descriptor of the file so that the address of the first block of data is changed to an address of the first sub-block, wherein a size of the first sub-block is smaller than a size of the first block.

REFERENCES

The Examiner relies upon the following prior art:

Name	Reference	Date
Dye	US 6,879,266 B1	Apr. 12, 2005
Veeraswamy	US 7,653,612 B1	Jan. 26, 2010
Throop	US 8,478,731 B1	July 2, 2013

REJECTIONS

Claims Rejected	35 U.S.C. §	Reference(s)/Basis
1 – 4, 6 – 23	112, first paragraph	
1 – 4, 7 –23	103(a)	Dye, Veeraswamy
6, 24	103(a)	Dye, Veeraswamy, Throop

We have only considered those arguments that Appellant actually raised in the Briefs. Arguments Appellant could have made but chose not to make in the Briefs have not been considered and are deemed to be waived (*See* 37 C.F.R. § 41.37(c)(1)(iv)).

OPINION

35 U.S.C. § 112, first paragraph: Claims 1–4 and 6–23

The Examiner determines claims 1–4 and 6–23 fail to comply with the written description requirement (Final Act. 2–4). Specifically, the Examiner determines the Specification describes “the file descriptor (inode) and how [in] using the inode[,] the determination is made of the blocks and their addresses to process for the compression or input/output function” (*id.* at 4). However, the Examiner finds the Specification fails to “mention of wherein the file descriptor of the file is stored in the file system separately from the blocks and sub-blocks that store data associated with the file” (*id.*) (emphasis omitted). The Examiner additionally points to our Decision of June 2, 2016 in which the Board stated “[t]he Specification further does not define explicitly an inode or more specifically, define an inode as *requiring* separate storage from its associated data” (Decision of June 2, 2016, 5 (emphasis added)).

Appellant argues claims 1–4 and 6–23 comply with the written description requirement (Appeal Br. 8–10). Appellant identifies Figure 4 and paragraph 28 of the Specification as support that an ordinarily skilled artisan “would recognize an inode as an example of a file descriptor” (Appeal Br. 8–9). Appellant next asserts “[i]nodes are depicted and described in the specification as being separate from the blocks that store data” (*id.* at 9). Appellant points to description of Figure 3 and paragraph 46 (*id.*).

We are persuaded by Appellant’s contentions. In our previous Decision, we stated the Specification does not *require* an inode have separate storage from its associated data (Decision of June 2, 2016, 5). However, the Specification provides examples of an inode being stored separately from sub-blocks. Additionally, we agree with Appellant that an ordinarily skilled artisan would understand an inode to be an example of a file descriptor (Appeal Br. 9). Appellant’s Specification describes a detailed view of file inode 310(0) (Spec. ¶ 28). We determine both the description in the Specification and Figure 4A would be understood by an ordinarily skilled artisan as teaching “the file descriptor of the file is stored in the file system separately from the blocks and sub-blocks that store data of the file,” as recited in independent claim 1 and commensurately recited in independent claims 10 and 19.

Accordingly, Appellant has persuaded us independent claims 1, 10, and 19 comply with the written description requirement under 35 U.S.C. § 112, first paragraph. Dependent claims 2–4, 6–9, 11–18, and 20–23 thus stand with their respective independent claims.

35 U.S.C. § 103: Claims 1–4 and 7–23

Appellant contends their invention as recited in claims 1–4 and 7–23, is not obvious over Dye and Veeraswamy (Appeal Br. 10–17). We agree with the Examiner’s findings and conclusions and emphasize the following.

Independent Claim 1

Appellant argues independent claim 1 is not obvious over Dye and Veeraswamy (*id.*). The issues presented by the arguments is whether the combination of Dye and Veeraswamy teaches, suggests, or otherwise renders obvious:

- (i) “wherein data of files within the file system are stored in blocks and sub-blocks”
- (ii) “accessing a file descriptor of the file,” and
- (iii) “wherein the file descriptor of the file is stored in the file system separately from the blocks and sub-blocks that store data of the file”

as recited in claim 1, and whether an ordinarily skilled artisan would have found it obvious to combine the teachings and suggestions of Dye and Veeraswamy (*id.*).

- (i) *wherein data of files within the file system are stored in blocks and sub-blocks*

The Examiner relies on Dye’s description to teach the disputed limitation:

The compressed data directory 271 is used for look up of the address block start location for one of the L3 data cache 291, the SRAM buffers (located in the Parallel Compression and Decompression unit 251) or the system memory 110. Thus, the

compression control unit 281 receives requests from other units in the IMC 140, translates the location by address, determines the compression block size, and controls the sub-units of the memory controller 220 for the proper address and data transactions as required to read or write data to and from the main system memory 110

(Ans. 5 (Dye, 19:2–12)).

Appellant first argues “[a] collection of blocks and sub-blocks does not constitute a file system” (Appeal Br. 11). According to Appellant, Dye fails to teach a “logical structure on data beyond the mere presence of physical blocks of data” and thus, Dye’s memory device “simply stores blocks of data at addresses within the memory device without any file system, as that term is used in” the Specification (*id.*).

We are not persuaded by Appellant’s contentions. Initially, we note Appellant provides no cites to the Specification or any other evidence to support their assertion; thus, proffering only attorney argument. Additionally, we note the Specification does not explicitly define “file system” (*see generally* Spec.). The Specification does teach in one embodiment “[f]ile system 115 contains a plurality of files of various types, *typically* organized into one or more directories” (Spec. ¶ 18 (emphasis added)). However, this description does not provide an explicit definition.

Appellant next argues Dye does not teach “storing compressed data within a file system in blocks and sub-blocks” (Appeal Br. 11). According to Appellant, “Dye uses the term ‘blocks’ to describe units of compressions for data . . . not a block in a file system” (*id.* at 12).

We are not persuaded by Appellant’s contentions. Dye describes, for example:

First, main memory compression increases the effective size of main memory by compressing and storing a large block of data into a smaller space

(Dye, 4:4–6).

In the priority compression format, memory address blocks assigned by the operating system for uncompressed data are used to store the compressed data

(*id.* at 7:48–50). Dye further describes data is stored in blocks of data (uncompressed data) and sub-blocks of data (compressed data) (Ans. 6–7 (Dye 19:1–12)). Thus, Appellant has not proffered sufficient evidence or argument to persuade us Dye fails to teach the disputed limitation.

Appellant further argues “[b]locks and sub-blocks of a file system have a specific size dictated by the file system, whereas ‘blocks’ in *Dye* have variable sizes” (Appeal Br. 12). Appellant has not proffered sufficient evidence or argument to persuade us blocks and sub-blocks have a specific size or a fixed size. Indeed, Appellant identifies no disclosure in the Specification to support this assertion nor does Appellant provide any evidence that an ordinarily skilled artisan would understand a file system to have blocks and sub-blocks of a specific size (*see generally* Appeal Br. 11–13). In particular, the Specification provides no explicit definition of either term, “block” or “sub-block” (*see generally* Spec.). The claim recites compressing a block of data and storing the compressed block of data within a sub-block, “wherein a size of the first sub-block is smaller than a size of the first block” (Claim1) but does not recite a specific size. Thus, Appellant’s contention is not persuasive.

Next, Appellant contends “[t]he ‘blocks’ in *Dye* are not part of a file system . . . , but are merely stored at an address of a memory device and not

referenced by an inode” (Appeal Br. 12). As noted *supra*, the term “file system” is not defined explicitly; rather, a description teaches a file system “contains a plurality of files of various types, typically organized into one or more directories” (Spec. ¶ 18). Appellant has not proffered sufficient evidence or argument to persuade us Dye fails to disclose the recited limitation.

In the Reply Brief, Appellant contends Dye’s “compressed data directory 271 . . . at best indicates the starting address locations of *hardware components* of the computing system, such as a data cache, buffers, and system memory” (Reply Br. 3). We are not persuaded by Appellant’s contentions. Dye describes the compressed data directory “is used for look up of address block start location” for the various hardware components; however, Dye further describes determining the proper address required to read or write data (Dye, 19:2–12). Thus, we are not persuaded this disclosure would be understood by an ordinarily skilled artisan to mean “the memory device in *Dye* simply stores blocks of data at addresses within the memory device without any file system, *as that term is used in the Appellant’s application*” (Reply Br. 4) (emphasis added). As discussed *supra*, Appellant has not set forth how or where “file system” is defined explicitly in the Specification or even pointed out where “file system” is described in the Specification. “Argument in the brief does not take the place of evidence in the record” (*In re Schulze*, 346 F.2d 600, 602 (CCPA 1965) (citing *In re Cole*, 326 F.2d 769, 773 (CCPA 1964))). Accordingly, Appellant has not persuaded us Dye fails to teach “wherein data of files within the file system are stored in blocks and sub-blocks,” as recited in claim 1.

(ii) “*accessing a file descriptor of the file*”

Appellant argues:

Appellant respectfully submits that Dye does not teach accessing a file descriptor of a file, as disclosed in the present application. The address bus in Dye may not be identified as a file descriptor, because a simple address bus, such as that in Dye, does not reference blocks of a file system. No person of skill in the art would identify an address bus as an inode or file descriptor

(Appeal Br. 13). Appellant provides no cites or evidence and proffers insufficient argument to persuade us Dye fails to disclose “accessing a file descriptor of the file” (*id.*). Moreover, upon a cursory inspection of the Specification, we are unable to find any explicit definition or discussion of a file descriptor (*see generally* Spec.).

In the Reply Brief, Appellant repeats the argument discussed above, that the compressed data director “indicates the starting address locations of *hardware components* of the computing system” and “is not a descriptor of a *file*” (Reply Br. 4). However, the Examiner additionally relies on Dye’s Figures 21–25 as teaching this limitation. Appellant has not addressed this disclosure. Thus, we are not persuaded by Appellant’s contention that Dye fails to teach “accessing a file descriptor of the file,” as recited in claim 1.

(iii) “*wherein the file descriptor of the file is stored in the file system separately from the blocks and sub-blocks that store data of the file*”

Appellant contends that “*Veeraswamy* does not teach a file descriptor being stored separately from the blocks and sub-blocks of a file system because the shallow file is not an inode or file descriptor” (Appeal Br. 13). According to Appellant,

Veeraswamy teaches a shallow file to contain “data block mapping metadata of a primary file containing the electronic document” so that the “file system manager” can back up data by using the “data block mapping metadata to access directly the data blocks of the primary file in storage.” But, even though the shallow files contain data block mapping metadata and link target addresses, the shallow files are files and not inodes or file descriptors and, in fact, have their own inodes. To claim otherwise is to misread the clear teachings of the reference, i.e., that inodes and files are different entities.

(*id.* (citing Veeraswamy, 1:48–63, 7:21–32) (citations omitted)).

Appellant’s argument is not commensurate with the claim language. Indeed, the claim language does not prohibit different files: “wherein the file descriptor of the file is stored in the *file system* separately from blocks and sub-blocks that store data of the file” (*see* Claim 1). Veeraswamy teaches “[t]he shallow file includes the data block mapping metadata of a primary file containing the electronic document but not the data blocks of the primary file. Instead the shallow file includes a link to the primary file” (Veeraswamy, 1:57–60). Appellant contends the shallow file is not a file descriptor (*id.*). As set forth *supra*, Appellant has not shown the term “file descriptor” is defined explicitly in the Specification or shown any use of the term in the Specification.

Appellant is reminded that a general allegation as to the purported benefits of the claimed invention, and a general discussion of the prior art relied upon by the Examiner in the rejection, are not tantamount to a responsive argument. Such a response to the Examiner’s findings is insufficient to persuade us of Examiner error, as mere attorney arguments and conclusory statements that are unsupported by factual evidence are entitled to little probative value (*In re Geisler*, 116 F.3d 1465, 1470 (Fed.

Cir. 1997); *see also In re De Blauwe*, 736 F.2d 699, 705 (Fed. Cir. 1984); *see also In re Lovin*, 652 F.3d 1349, 1357 (Fed. Cir. 2011) (“[W]e hold that the Board reasonably interpreted Rule 41.37 to require more substantive arguments in an appeal brief than a mere recitation of the claim elements and a naked assertion that the corresponding elements were not found in the prior art.”); *cf. In re Baxter Travenol Labs.*, 952 F.2d 388, 391 (Fed. Cir. 1991) (“It is not the function of this court to examine the claims in greater detail than argued by an appellant, looking for [patentable] distinctions over the prior art.”)).

Appellant has not persuaded us the combination of *Dye* and *Veeraswamy* fails to teach or suggest “wherein the file descriptor of the file is stored in the file system separately from the blocks and sub-blocks that store data of the file,” as recited in claim 1.

(iv) *Motivation to combine*

Appellant argues “(a) *Veeraswamy* and *Dye* do not appear to be in the same field of art and . . . (b) the teachings of the two references conflict with each other” (Appeal Br. 14). According to Appellant, the two references

do not appear to solve the same problem. *Dye* is in the field of compression in volatile memory while *Veeraswamy* is in the field of backing up files without interfering with a user's access of the file. In addition, *Dye* gives no reason to use a shallow file to back up memory data and *Veeraswamy* gives no reason to apply a shallow file to volatile memory. Therefore, one of skill in the art would not have combined *Veeraswamy* with *Dye*.

(Appeal Br. 14; Reply Br. 5). A reference qualifies as prior art for a determination under § 103 when it is analogous to the claimed invention (*In re Clay*, 966 F.2d 656, 658 (Fed. Cir. 1992)). “Two separate tests define the

scope of analogous art: (1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved" (*In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004)). "A reference is reasonably pertinent if . . . it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem" (*Clay*, 966 F.2d at 659).

The Examiner has set forth that the references are in the same field of study —"intelligent storage using compression" — as the present application (Final Act. 7). Appellant would define the field of study of each reference more narrowly than that set forth by the Examiner (Appeal Br. 14; Reply Br. 5). We are not persuaded by Appellant's contention. We agree with the Examiner that the current application is directed toward intelligent storage through use of block compression (Spec., ¶ 1, Title). We further agree that Dye describes a "memory module including parallel data compression and decompression engines for improved performance" (Dye, Abstract) — intelligent storage using compression. Veeraswamy is directed to "file systems . . . and data protection services that use shared access to a file in order to protect computer data stored in the file" in a data processing system (Veeraswamy, 1:6–11). The data protection services may include compression (*id.* at 1:31–34). Thus, Veeraswamy is also directed to intelligent storage using compression. Accordingly, we determine the art, Dye and Veeraswamy, are from the same field of endeavor.

The Examiner points to the Abstract of Veeraswamy to support the contention an ordinarily skilled artisan would have combined the teachings

of Veeraswamy and Dye. Appellant's contends "Dye gives no reason to use a shallow file to back up memory data and *Veeraswamy* gives no reason to apply a shallow file to volatile memory" (Appeal Br. 14). Appellant proffers insufficient evidence or argument to persuade us of error in the Examiner's findings. In particular, Appellant provides insufficient evidence that an ordinarily skilled artisan would not have combined Veeraswamy's teaching of using a shallow file to Dye's system.

(v) *Conclusion*

Appellant has not persuaded us the Examiner erred in finding the combination of Dye and Veeraswamy teaches or suggests the limitations as recited in independent claim 1. Therefore, we sustain the rejection of claim 1 under 35 U.S.C. § 103(a) for obviousness over Dye and Veeraswamy.

Independent Claim 10

Appellant argues Dye and Veeraswamy fail to teach the elements of claim 10 and, in particular, "wherein data of files in the file system are stored in blocks and sub-blocks," "accessing a file descriptor of the file," and "wherein the file descriptor of the file is stored in the file system separately from the blocks and sub-blocks that store data of the file" (Appeal Br. 15–16). For the reasons discussed *supra*, Appellant has not persuaded us the combination of Dye and Veeraswamy fails to teach these elements.

Appellant additionally contends the combination fails to teach "dividing the first block of data into a plurality of substreams [and] compressing each substream included in the plurality of substreams" and "storing each compressed substream into a different portion of a first sub-block," as recited in claim 10.

- (i) “dividing the first block of data into a plurality of substreams [and] compressing each substream included in the plurality of substreams”

The Examiner finds Dye teaches the disputed element (Final Act. 10–11 (citing Dye, 19:6–12, 45:13–40)).

Appellant contends Dye fails to teach the disputed limitation; rather, “Dye merely teaches compressing all the data of a memory transaction. As such, the invention in Dye does not provide the advantage of a processor compressing a portion of data while not compressing other portions” (Appeal Br. 15). Appellant is arguing limitations not recited in the claim. The claim limitation does not preclude compressing all data of a memory transaction.

Appellant additionally contends:

Dye teaches a memory device receiving data from a requesting agent before compressing the received data in its entirety. The data is stored in a memory device and not in sub-streams of a file system. As such, when a memory transaction occurs in *Dye*, there is not motivation for a processor to divide the data of the transaction into substreams and to individually compress those substreams

(Appeal Br. 15–16). Again, Appellant provides no cites nor does Appellant specifically address the Examiner’s findings set forth in the Final Action (*id.*). The Examiner further cites additional description of Dye in the Answer (Ans. 7–8), including that Dye teaches a compression reordering algorithm in which “the block is reordered so that the segment(s) most likely to be accessed in the future, e.g., most recently used, are placed in the front of the block” (Dye, 8:14–35) and techniques of Memory F/X Technology (Ans. 8 (citing Dye, 7:8–19)). Appellant does not address the Examiner’s findings, but rather, repeats the contentions set forth in the Appeal Brief

(Reply Br. 6). Accordingly, Appellant has not persuaded us Dye fails to teach the disputed limitation.

(ii) *“storing each compressed substream into a different portion of a first sub-block”*

The Examiner cites Dye as teaching the disputed element (Final Act. 11 (citing Dye, 22:36–62, 29:64–30:13, 35:61–64, 36:16–31); Ans. 8 (citing Dye 19:1–12)).

Appellant argues “storing compressed data at different addresses of a memory device is different from storing substreams of compressed data into different sub-blocks of a storage device” (Appeal Br. 16). According to Appellant, Dye fails to teach “storing those compressed substreams into the same sub-block, the substreams having originated from the same block of file data” (*id.*). We are not persuaded. Again, Appellant provides no cites but rather provides conclusory arguments in response to the cited teachings of Dye. Indeed, the Examiner has set forth specific teachings which Appellant has not addressed. Moreover, we note that Dye teaches reordering of a block so that the segment most likely to be accessed is placed in the front of the block (Ans. 7 (citing Dye, 8:14–35)). Thus, the segments of a block (compressed substream) are stored into a different portion of the block (sub-block). Accordingly, Appellant has not persuaded us Dye fails to teach the disputed limitation.

(iii) *Conclusion*

Appellant has not persuaded us the Examiner erred in finding Dye and Veeraswamy fail to teach or suggest claim 10.

Independent Claim 19

Appellant argues claim 19 based on the same arguments set forth with respect to claim 1 (Appeal Br. 16–17). For the reasons set forth *supra*, Appellant has not persuaded us of error in the Examiner’s findings and conclusions. Accordingly, Appellant has not persuaded us the combination of Dye and Veeraswamy fails to teach or suggest the limitations as recited in independent claim 19.

Dependent Claims 2–4, 7–9, 11–18, and 20–23

Dependent claims 2–4, 7–9, 11–18, and 20–23 are not separately argued and thus, these claims fall with their respective independent claims.

Conclusion

Appellant has not persuaded us the Examiner erred in finding the combination of Dye and Veeraswamy teaches or suggests the limitations as recited in claims 1–4 and 7–23. Therefore, we sustain the rejection of claims 1–4 and 7–23 under 35 U.S.C. § 103(a) for obviousness over Dye and Veeraswamy.

35 U.S.C. § 103: Claims 6 and 24

Appellants contend their invention as recited in claims 6 and 24, is not obvious over Dye, Veeraswamy, and Throop (Appeal Br. 11).

Claim 24

Appellant argues Dye, Veeraswamy, and Throop fails to teach claim 24 (Appeal Br. 17–18). The issue presented by the arguments is whether the combination of Dye, Veeraswamy, and Throop teaches, suggests, or otherwise renders obvious “storing the compressed first block of data within

the first sub-block” and “the file descriptor containing references to blocks containing uncompressed data and sub-blocks containing compressed data.” Appellant argues these elements based on the arguments set forth with respect to claim 1 (*id.*). For the reasons set forth *supra*, Appellant has not persuaded us the Examiner erred in finding the combination of Dye and Veeraswamy teaches the disputed limitations.

Appellant further argues Dye fails to teach “wherein the reference to the first block of data is updated to refer to the first sub-block,” as recited in claim 24 (Appeal Br. 18). Specifically, Appellant argues “in none of the cited portions of *Dye* is there a teaching of updating a reference to a block to refer to a sub-block” (*id.*).

The Examiner finds Dye teaches the disputed limitation (Final Act. 20 (citing Dye, 22:36–62, 29:64–30:13, 35:61–64, 36:16–31); Ans. 11 (citing (Dye, 7:8–19, 8:4–14, 35:61–64, 36:27–31, 38:57–59, 38:10–27, Fig. 21))).

Appellant has not addressed the Examiner’s findings. Again, Appellant provides no cites but rather sets forth attorney argument without persuasive evidence or argument. For example, the Examiner cites to Dye to teach compressing data and writing back a pointer to the compressed data block (Ans. 11 (Dye, 38:10–27)), but Appellant does not distinguish this teaching from the limitation “wherein the reference to the first block of data is updated to refer to the first sub-block,” as recited in claim 24. Accordingly, we are not persuaded by Appellant’s contention.

Claim 6

Claim 6 is not argued separately. Claim 6 depends from independent claim 1 and thus, falls with independent claim 1. Therefore, for the reasons

set forth *supra*, Appellant has not persuaded us the combination of Dye, Veeraswamy, and Throop fails to teach claim 6.

Conclusion

Appellant has not persuaded us the Examiner erred in finding the combination of Dye, Veeraswamy, and Throop teaches or suggests the limitations as recited in claims 6 and 24. Therefore, we sustain the rejection of claims 6 and 24 under 35 U.S.C. § 103(a) for obviousness over Dye, Veeraswamy, and Throop.

CONCLUSION

The Examiner's rejection is AFFIRMED.

More specifically, we affirm the rejections of claims 1–4 and 6–24 for obviousness under 35 U.S.C. § 103. We, however, reverse the rejection of claims 1–4 and 6–23 as failing to comply with the written description requirement under 35 U.S.C. § 112(a).

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1-4, 6-23	112, first paragraph			1-4, 6-23
1-4, 7-23	103(a)	Dye, Veeraswamy	1-4, 7-23	
6, 24	103(a)	Dye, Veeraswamy, Throop	6, 24	
Overall Outcome			1-4, 6-24	

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