

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DOUGLASS A. WISTENDAHL and
LEIGHTON K. CHONG

Appeal 2008-4845
Application 09/815,020
Technology Center 2400

Decided: January 14, 2009

Before MAHSHID D. SAADAT, ROBERT E. NAPPI, and JOHN A.
JEFFERY, *Administrative Patent Judges*.

NAPPI, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 6(b) of the final
rejection of claims 2-9 and 14-16.¹

We affirm the Examiner's rejection of these claims.

¹ Claims 1 and 13 were previously cancelled. Claims 10-12 were previously
withdrawn from consideration.

INVENTION

The invention is directed to a system for converting existing TV content to an interactive TV program. Claim 4 is representative of the invention and reproduced below:

4. A system for converting existing TV content to an interactive TV program comprising:
 - (a) TV content in the form of a series of successive display frames in a time sequence which is transmitted to a TV set top box;
 - (b) object mapping data specifying display locations of objects as hot spot positions appearing in the display frames of the TV content to be rendered interactive which are transmitted to the TV set top box;
 - (c) an interactive TV utility program stored in the TV set top box which processes linkages from objects specified by the object mapping data to respective interactive functions to be performed upon viewer selection of the objects in conjunction with a display of the TV content; and
 - (d) a TV display system including the TV set-top box and associated remote control unit for receiving the transmitted TV content and object mapping data and operating the interactive TV utility program in conjunction with the display of the TV content by using the object mapping data to determine when the viewer is pointing to and selecting an object appearing in a display frame with the remote control unit and causing the interactive function linked by the corresponding linkage of the interactive TV utility program to be performed, wherein the remote control unit has directional buttons and a selecting button that are adapted as a pointing device.

REFERENCES

Thompson	US 5,236,199	Aug. 17, 1993
Gibson	US 5,539,871	Jul. 23, 1996
Iwamura	US 5,602,564	Feb. 11, 1997

Hendricks	US 5,990,927	Nov. 23, 1999
Mills	US 6,055,560	Apr. 25, 2000 (filed Nov. 6, 1996)
Butler	US 2002/0007493 A1	Jan. 17, 2002 (filed Jul. 29, 1997)
Hiraki	US 6,392,674 B1	May 21, 2002 (filed Jul. 28, 1999)

REJECTIONS AT ISSUE

The Examiner rejected independent claims 4 and 16 and dependent claims 2, 7, and 14 under 35 U.S.C. § 103(a) as unpatentable over Hendricks in view of Gibson.

The Examiner rejected claims 3 and 15 under 35 U.S.C. § 103(a) as unpatentable over Hendricks in view of Gibson and further in view of Butler.

The Examiner rejected claims 5 and 6 under 35 U.S.C. § 103(a) as unpatentable over Hendricks in view of Gibson and further in view of Mills.

The Examiner rejected claims 8 and 9 under 35 U.S.C. § 103(a) as unpatentable over Hendricks in view of Gibson and further in view of Hiraki.

The Examiner rejected claims 8 and 9 under 35 U.S.C. § 103(a) as unpatentable over Hendricks in view of Gibson and further in view of Thompson.

ISSUES

Rejection under 35 U.S.C. § 103(a) as unpatentable over Hendricks in view of Gibson.

Appellants argue on pages 7 through 9 of the Appeal Brief that the Examiner's rejection of claims 2, 4, 7, 14, and 16 is in error.² Appellants argue that Gibson is not analogous art. App. Br. 9. Appellants additionally argue that the Examiner's rejection is in error because the combination of Hendricks' TV set top box with Gibson's interactive functions linked to "hot spot" objects amounts to hindsight reconstruction. App. Br. 9. Appellants further assert there is no teaching, suggestion, or motivation to combine the Hendricks and Gibson references. App. Br. 9.

Thus, with respect to claims 2, 3, 4, 7, 14, and 16, Appellants' contentions present us with two issues. First, did the Examiner err in finding Gibson is analogous art? Second, did the Examiner err in finding that one skilled in the art would combine Hendricks' TV set top box with Gibson's interactive functions linked to "hot spot" objects?

² We note that Appellants do not specifically mention claims 4, 7, or 16 within the body of the first argument. Therefore, we select independent claim 4 as representative of the group comprising claims 4, 7, and 16. Claims 2 and 14 are grouped together and we select claim 2 to be representative of the group comprising claims 2 and 14. Additionally, claim 3 is argued within the body of the first argument even though the rejection of claim 3 contains an additional reference and is not included in the first argument's heading. However, we will still address claim 3 under this argument.

Rejection under 35 U.S.C. § 103(a) as unpatentable over Hendricks in view of Gibson and further in view of Butler.

Appellants argue on page 10 of the Appeal Brief that the Examiner's rejection of claims 3 and 15 is in error. Appellants argue that the Butler reference is not prior art because the filing date of Appellants' original patent application antedates the Butler reference. App. Br. 10. In addition, Appellants argue that "[t]he original application described and claimed the system of converting existing TV programs into interactive TV programs by defining 'hot spots' as marker positions in a mask overlay on the TV content display." App. Br. 10.

Thus, with respect to claims 3 and 15, Appellants' contentions present us with the issue: did the Examiner err in finding the Butler reference is prior art?

Rejection under 35 U.S.C. § 103(a) as unpatentable over Hendricks in view of Gibson and further in view of Mills.

Appellants argue on pages 10 through 11 of the Appeal Brief that the Examiner's rejection of claims 5 and 6 is in error. Appellants argue that the Mills reference is not prior art because the filing date of Appellants' original patent application antedates the Mills reference. App. Br. 11.

Thus, with respect to claims 5 and 6, Appellants' contentions present us with the issue: did the Examiner err in finding the Mills reference is prior art?

Rejection under 35 U.S.C. § 103(a) as unpatentable over Hendricks in view of Gibson and further in view of Hiraki.

Appellants argue on page 11 of the Appeal Brief that the Examiner's rejection of claims 8 and 9 under 35 U.S.C. § 103(a) as being unpatentable

over Hendricks in view of Gibson and further in view of Hiraki is in error. Appellants' reason that the claims are allowable based on their dependency from claim 4. App. Br. 11.

Thus, Appellants' contentions present the same issues as presented with respect to claim 4.

Rejection under 35 U.S.C. § 103(a) as unpatentable over Hendricks in view of Gibson and further in view of Thompson.

Appellants argue on page 12 of the Appeal Brief that the Examiner's rejection of claims 8 and 9 under 35 U.S.C. § 103(a) as being unpatentable over Hendricks in view of Gibson and further in view of Thompson is in error. Appellants reason that the claims are allowable based on their dependency from claim 4. App. Br. 11.

Thus, Appellants' contentions present the same issues as presented with respect to claim 4.

FINDINGS OF FACT

Gibson

1. Gibson discloses "a data processing system for selectively associating stored data with an animated element within a multimedia presentation in a data processing system." Gibson, Abstract.
2. The data processing system includes video storage devices such as "laser disk players and video recording devices." Gibson, col. 3, ll. 19-25.
3. A display is used to show the visual portion of a multimedia presentation. Gibson, col. 3, ll. 46-50.
4. A skilled artisan knows a television is a type of display.

5. “[D]uring the multimedia presentation, the existence of the data set and the association between the data set and the selected animated element is graphically indicated utilizing a rectangle surrounding the animated element, a blinking figure near the animated element or any other suitable graphic indicator,” i.e., a hot spot. Gibson, Abstract.

Hendricks

6. Hendricks discloses an “advanced set top terminal capable of digital decompression, menu generation, interactivity and other advanced functional capabilities for use in a television program delivery system.” Hendricks, Abstract.
7. “The primary conduit for communication between the subscriber and the set top terminal is through ... a remote control device.” Hendricks, col. 11, ll. 64-66.
8. One skilled in the art would have used a remote control to select a hot spot during a multimedia presentation to provide additional information.

PRINCIPLES OF LAW

Office personnel must rely on Appellants' disclosure to properly determine the meaning of the terms used in the claims. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995) (en banc). “[I]nterpreting what is *meant* by a word *in* a claim ‘is not to be confused with adding an extraneous limitation appearing in the specification, which is improper.’” *In re Cruciferous Sprout Litigation*, 301 F.3d 1343, 1348, (emphasis in original) (citations and quotations omitted).

“The analogous-art test requires that the Board show that a reference is either in the field of the applicant’s endeavor or is reasonably pertinent to the problem with which the inventor was concerned in order to rely on that reference as a basis for rejection. References are selected as being reasonably pertinent to the problem based on the judgment of a person having ordinary skill in the art.” *In re Kahn*, 441 F.3d 977, 986-87 (Fed. Cir. 2006).

On the issue of obviousness, the Supreme Court has stated that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1739 (2007).

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. . . . [A] court must ask whether the improvement is more than the predictable

use of prior art elements according to their established functions.

Id. at 1740. “One of the ways in which a patent’s subject matter can be proved obvious is by noting that there existed at the time of the invention a known problem for which there was an obvious solution encompassed by the patent’s claims.” *Id.* at 1742.

35 U.S.C. § 120 states that:

[a]n application for patent for an invention disclosed in the manner provided by the first paragraph of section 112 of this title in an application previously filed . . . shall have the same effect, as to such invention, as though filed on the date of the prior application . . . if filed before the patenting or abandonment of or termination of proceedings . . . on an application similarly entitled to the benefit of the filing date of the first application

35 U.S.C. § 112, first paragraph, states that “[t]he specification shall contain a written description of the invention . . . in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, . . . to make and use the same” To satisfy the description requirement, one must show “possession” of the invention by describing the claimed invention, with all its claimed limitations, using descriptive means such as words, structures, figures, diagrams, formulas, etc. *See Lockwood v. American Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997). While the prior application need not describe the claimed subject matter in exactly the same terms as used in the claims, the specification must contain an equivalent description of the claimed subject matter. *Id.*

ANALYSIS

Rejection under 35 U.S.C. § 103(a) as unpatentable over Hendricks in view of Gibson.

Claims 4, 7, and 16

Appellants' arguments have not persuaded us of error in the Examiner's rejection of claims 4, 7, and 16. Appellants argue that Gibson is non-analogous art because a television is not analogous to a computer system. Reply Br. 2-4. Appellants reason that a "TV does not have a keyboard, and the TV remote control was a channel or program selector that was not analogous to a mouse used as a pointer on a personal computer." Reply Br. 4. However, the Examiner has found that Gibson comprises a "data processing system" and is not limited to a computer system. Ans. 14. We agree with the Examiner.

Prior art is considered analogous art when the reference comes from the same field as applicant's endeavor or is reasonably pertinent to the problem with which the inventor was concerned. *Kahn*, 441 F.3d at 986-87. Gibson comes from the same field of endeavor as Appellants' invention because both discuss systems that utilize displays for multimedia presentations. FF 3. Gibson teaches "a data processing system for selectively associating stored data with an animated element within a multimedia presentation in a data processing system." FF 1. The data processing system includes video storage devices such as "laser disk players and video recording devices." FF 2. A display is used to show the visual portion of a multimedia presentation. FF 3. A skilled artisan knows a television is a type of display. FF 4. Thus, Gibson is analogous art.

Appellants further assert that there is “no teaching, suggestion or motivation in the Gibson reference or the Hendricks reference to modify the Gibson interactive PC game program operable in the PC environment to run 'hot spot' data on a television set-top box and use the TV remote control as a pointer.” App. Br. 9. However, the Examiner has found that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the references in order to provide selectable hotspots to the viewer to indicate when relevant information is available during a multimedia presentation. Ans. 14. Appellants have provided no argument or evidence to show that this finding is in error. In the absence of such argument and evidence, we find the Examiner’s finding to be sufficient.

Nevertheless, the Court explained in *KSR*, 127 S. Ct. at 1739, “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” Hendricks discloses a an “advanced set top terminal capable of digital decompression, menu generation, interactivity and other advanced functional capabilities for use in a television program delivery system.” FF 6. “The primary conduit for communication between the subscriber and the set top terminal is through ... a remote control device.” FF 7. Gibson, as discussed above, discloses “a data processing system for selectively associating stored data with an animated element within a multimedia presentation in a data processing system.” FF 1. “[D]uring the multimedia presentation, the existence of the data set and the association between the data set and the selected animated element is graphically indicated utilizing a rectangle surrounding the animated element, a blinking figure near the animated element or any other suitable graphic indicator,” i.e., a hot spot. FF 5. One

skilled in the art would have found that a remote control can be used to select a hot spot during a multimedia presentation to provide additional information. FF 8. Appellants have not satisfied their burden of rebutting this fact. Therefore, modifying the remote control device of Hendricks with the hot spot indicator as taught in Gibson would have yielded predictable results, and therefore, would have been obvious to one of ordinary skill at the time of the invention. *See KSR*, 127 S. Ct. at 1739.

For the above reasons, Appellants have not shown the Examiner erred in rejecting claims 4, 7, and 16.

Claims 2 and 14

Appellants' arguments on page 9 of the Appeal Brief are the same as those discussed above with respect to independent claim 4.³ Further, Appellants' arguments group claim 14 with claim 2. Thus, Appellants' arguments with respect to the Examiner's rejection of claims 2 and 14 present us with the same issues as claim 4.

Claim 3

Appellants' arguments on page 9 of the Appeal Brief are the same as those discussed above with respect to independent claim 4.⁴ Thus, Appellants' arguments with respect to the Examiner's rejection of claim 3 present us with the same issues as claim 4.

³ While claims 2 and 14 contain additional limitations not found in claim 4, Appellants provide no additional arguments with regard to the additional limitations.

⁴ As we indicated previously, claim 3 is not properly argued under the rejection of Hendricks in view of Gibson since it contains an additional reference. However, we have addressed Appellants' arguments as if they were properly argued.

Rejection under 35 U.S.C. § 103(a) as unpatentable over Hendricks in view of Gibson and further in view of Butler.

The Examiner finds that Butler teaches the user of a HTML mask overlay. Ans. 8. Appellants do not dispute the Examiner's findings with respect to the content of the Butler reference. Nor do Appellants dispute the Examiner's findings that Butler fully meets the limitations in claims 3 and 15. Rather, Appellants argue that the Butler reference, filed July 29, 1997, is antedated by the filing date of the Appellants' original patent application (08/536,107) on September 29, 1995. App. Br. 10. Appellants argue that "[t]he original application described and claimed the system of converting existing TV programs into interactive TV programs by defining 'hot spots' as marker positions in a mask overlay on the TV content display." App. Br. 10. However, the Examiner has found Butler is prior art since Appellants are not entitled to the benefit of the earlier filing date. Ans. 15-16. The Examiner agrees that the original application discloses the use of an "overlay." Ans. 15. However, the Examiner has not found the original application includes an **HTML** mask overlay. Ans. 15. Thus, the Examiner has found that the original application fails to meet the written description requirements of 35 U.S.C. § 112, first paragraph, as required by 35 U.S.C. § 120. We agree.

Appellants have not shown where the claim limitation "HTML mask overlay" is found in the Original Specification. Additionally, Appellants do not indicate how or why an HTML mask overlay is the same as a mask overlay. As a result, we find that the original patent application (08/536,107) does not provide sufficient description to establish that Appellants were in possession of the invention now claimed. Thus,

Appellants have not shown the Examiner erred in applying Butler as a prior art reference in rejecting claims 3 and 15.

Rejection under 35 U.S.C. § 103(a) as unpatentable over Hendricks in view of Gibson and further in view of Mills.

The Examiner finds that Mills teaches the use of a halo for highlighting hotspots. Ans. 9. Appellants do not dispute the Examiner's findings with respect to the content of the Mills reference. Nor do Appellants dispute the Examiner's findings that Mills fully meets the limitations in claims 5 and 6. Rather, Appellants argue that the Mills reference, filed on November 8, 1996, is antedated by the filing date of the Appellants' original patent application, 08/536,107, on September 29, 1995. App. Br. 10. The Examiner has found Mills is prior art since Appellants are not entitled to the benefit of the earlier filing date. Ans. 16. The Examiner agrees that the Original Specification discloses "hot spots." Ans. 16. However, the Examiner has found the original patent application does not support the recited limitation "halo." Ans. 16. Thus, the Examiner has found that the original application fails to meet the written description requirements of 35 U.S.C. § 112, first paragraph, as required by 35 U.S.C. § 120. We agree.

Appellants have not shown where the claim limitation "halo" is found in the Original Specification nor do Appellants indicate the Original Specification contained the limitation "haloing." Therefore, we find that the original patent application (08/536,107) does not provide sufficient description to establish the Appellants were in possession of the invention now claimed. Thus, Appellants have not shown the Examiner erred in

applying Mills as a prior art reference in rejecting claims 5 and 6 as lacking novelty.

Rejection under 35 U.S.C. § 103(a) as unpatentable over Hendricks in view of Gibson and further in view of Hiraki.

Appellants' arguments have not persuaded us of error in the Examiner's rejection of claims 8 and 9. Appellants' arguments that the rejection of these claims is in error for the reasons discussed with respect to claim 4 is not persuasive for the reasons discussed *supra* with respect to claim 4. Therefore, we sustain the Examiner's rejection of claims 8 and 9.

Rejection under 35 U.S.C. § 103(a) as unpatentable over Hendricks in view of Gibson and further in view of Thompson.

Appellants' arguments have not persuaded us of error in the Examiner's rejection of claims 8 and 9. Appellants' arguments that the rejection of these claims is in error for the reasons discussed with respect to claim 4 is not persuasive for the reasons discussed *supra* with respect to claim 4. Therefore, we sustain the Examiner's rejection of claims 8 and 9.

CONCLUSIONS OF LAW

Appellants have not shown the Examiner erred in either finding Hendricks and Gibson are analogous art or that one skilled in the art would have combined Hendrick's TV set top box with Gibson's interactive functions linked to "hot spot" objects.

Appellants have not shown the Examiner erred in finding Butler is prior art.

Appellants have not shown the Examiner erred in finding Mills is prior art.

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ORDER

The Examiner's rejection of claims 2-9 and 14-16 is affirmed.

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

AFFIRMED

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