

The opinion in support of the decision being entered today
was **not** written for publication and
is **not** binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ERIC A. BUNN, NESCHAE XAVIER FERNANDO and
LLAVANYA FERANDO

Appeal No. 2006-3178
Application No. 09/615,363
Technology Center 3600

Decided: February 22, 2007

Before MURRIEL E. CRAWFORD, ROBERT E. NAPPI and ANTON W.
FETTING, **Administrative Patent Judges**.

ROBERT E. NAPPI, **Administrative Patent Judge**.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 of the final
rejection of claims 12 through 17 and 21 through 33. For the reasons stated
infra we affirm in part the Examiner's rejection of these claims.

Invention

The invention is directed to a system for virtual shopping. The system simulates various characteristics of the products being sold. These characteristics include sound, vibration, mass, texture, smell and three dimensional visualization. See pages 6 and 7 of Appellants' specification. Claim 12 is representative of the invention and reproduced below:

A system to present a virtual representation of at least one product for purchase by a user of the system, the system including:
a processor unit;
memory, coupled to said processor unit, storing an approximation of an image of said product;
a visual sub-system, functionally coupled to said memory and defining a three-dimensional display area, that simulates said image for said user such that a three-dimensional visual representation of said product appears in said display area;
a monitor, functionally coupled to said processor unit, to display for viewing by said user a selection including each said product; and
a sales unit, coupled to said processor unit, enabling said user to purchase said product.

References

The references relied upon by the Examiner are:

Nagamitsu	US 5,590,062	Dec. 31, 1996
Burke	US 5,848,399	Dec. 08, 1998
Reisman	US 6,658,464	Dec. 02, 2003

(Filed Apr. 20, 2000)

Rejections at Issue

Claims 12 through 15, 17 and 27 stand rejected under 35 U.S.C. § 102(b) as anticipated by Burke. The Examiner's rejection is set forth on pages 3 and 4 of the Answer. Claim 16 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Burke in view of Reisman. The Examiner's rejection is set forth on pages 4 and 5 of the Answer. Claims 21 through 26 and 28 through 33 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over Burke in view of Reisman and Nagamitsu. The Examiner's rejection is set forth on pages 5 and 6 of the Answer. Throughout the opinion we make reference to the Brief and the Answer for the respective details thereof.

Issues

A) Rejection under 35 U.S.C. § 102(b):

Appellants contend that the Examiner's rejection of claims 12 through 15, 17 and 27 under 35 U.S.C. § 102(b) is in error. Appellants assert, on pages 6 and 7 of the Brief that Burke does not teach a three dimensional display area as recited in independent claim 12. Further, Appellants assert that Burke does not teach a three dimensional display area and a monitor.

The Examiner contends that claims 12 through 15, 17 and 27 are properly rejected under either 35 U.S.C. § 102(b). The Examiner states on page 7 of the Answer that Burke teaches a three display area to present three dimensional displays, citing figure 3. Further, on page 4, of the Answer, the Examiner states that Burke teaches the claimed monitor in column 6, lines 23-50.

Appellants' contentions directed to the rejection under 35 U.S.C.

§ 102(b) raise two issues for us to consider. First whether Burke teaches displaying a three dimensional representation in a three dimensional display area. Second, whether Burke teaches a monitor separate from the claimed visual subsystem.

B) Rejections under 35 U.S.C. § 103:

1) Rejection of claim 16.

Appellants contend that the Examiner's rejection of claim 16, under 35 U.S.C. § 103 (a) as being unpatentable over Burke in view of Reisman is in error. Appellants contend, on pages 8 and 9 of the Brief that the addition of Burke does not remedy the error asserted in the Examiner's rejection of independent claim 12. Further, Appellants assert that Reisman is non-analogous art and does not teach the claimed feature of simulating two additional characteristics of the product.

The Examiner contends that the rejection of claim 16 is proper and that Reisman is analogous art. Further, the Examiner states, on page 8 of the Answer, that Reisman discloses simulating two additional characteristics as Reisman discloses presetting text, graphic, sound and video.

The preliminary issue with respect to the rejection of claim 16, is whether independent claim 12, upon which claim 16 depends, is properly rejected by the combination of the references. The other issue presented with respect to claim 16 is whether Reisman is analogous art and whether the combination of the references teach the claim limitations.

2) Rejection of claims 21 through 26 and 28 through 33.

Appellants contend on that the Examiner's rejection of claims 21 through 26 and 28 through 33 is in error. Appellants argue, on pages 10 and

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11 of the Brief that the addition of Nagamitsu does not remedy the error asserted in the Examiner's rejection of independent claim 12. Further, Appellants argue that Nagamitsu teaches simulating an environment solely through visual means where as the claimed invention makes use of other means to simulate a product.

The Examiner contends that the rejection of claims 21 through 26 and 28 through 33 are proper. Further, the Examiner states, on page 8 of the Answer, that "the scope of the claims, as currently presented, reads on the cited art due to the breath of the claims."

The preliminary issue with respect to the rejection of claims 21 through 26 and 28 through 33, is whether the rejection of independent claim 12 and 17 are properly rejected by the combination of the references. The other issue presented with respect to claims 21 through 26 and 28 through 33 is whether Nagamitsu in combination teach simulating an environment other than through visual means.

Findings of Fact.

Appellants' specification discloses a virtual shopping system. The system allows the user to experience simulations of product attributes and select products to purchase. These functions are accomplished through subsystems. A communications sub-system allows the user to provide input to the system and includes a monitor. See page 14, lines 19-24 and page 18 line 15 through page 19 line 16 of Appellants' specification. Another sub-system provides the user with a three dimensional representation of the product. This sub-system is depicted in figure 3, 10 and 11. The system includes a projector and a screen in a dome. Three dimensional images are projected, through a series of mirrors on to the screen. See Appellants' specification page 10, lines 26-30 and page 20, lines 3 through 15. The user then views the image projected on the screen. The screen is depicted as a flat screen and described as a "light-reflecting, non-mirror surface" and "[t]he screens used in motion-picture or slide projectors are examples." See Appellants' specification page 10, lines 26-30. The screen is inside the dome and "[t]he dome defines a physical space for the projected image and helps the illusion that the physical object is inside." See Appellants' specification page 10, lines 21 through 22.¹ Thus, Appellants' specification teaches that the visual sub-system projects a three dimensional representation on a two dimensional screen which is mounted in a dome.

¹ This is in contrast to Appellants' argument on page 6 of the Brief characterizing the image as "occupying the space in the dome" or "taking on the three-dimensionality of the dome." We find no support in Appellants' originally filed specification for such images.

Burke teaches a virtual shopping system where a user is presented with views of store shelves with products on the shelves. See figures 7, 8, 12 and column 5, lines 22 through 34. The user can select a product and the system will provide the user with a three dimensional representation of the product. See figure 10 and column 6, line 22 through 39. The image is presented to the user by a cathode ray tube. See column 5, line 50-51. The user can also use the system to select products to purchase. See column 6, line 51 through 61.

Reisman teaches a system to display information from a remote source. See abstract. Reisman discloses that web browsers can be used to display information from a remote source and that such information can include text graphic, sound and video. See column 35 line 29 through 36.

Nagamitsu teaches a system for virtually simulating environments. See abstract. The user of the system wears a headset with two displays, one for each eye. The two displays operate to provide a stereoscopic, virtual view of the environment. See figure 3, and column 12, lines 6 through 9. The system also simulates temperature or noise in the environment. In one embodiment the values of these environment factors are represented by a virtual “soft-robot” which is depicted in the virtual environment. See column 16, lines 26 through 44. The values are presented by expressions or other characteristics of the robot. See figures 14 through 17. Nagamitsu also teaches that for the environmental factor of sound, the simulation may be altered so that the user can actually experience the sound environment. See column 22 lines 1-10.

Principles of Law

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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 F3d 967, 980, 34 USPQ2d 1321, 1330 (Fed. Cir. 1995). “[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.’” (emphasis original) *In re Cruciferous Sprout Litigation*, 301 F.3d 1343, 1348, 64 USPQ2d 1202, 1205, (Fed. Cir. 2002) (citing *Intervet America Inc v. Kee-Vet Laboratories Inc.*, 12 USPQ2d 1474, 1476 (Fed. Cir. 1989)

Analysis

A) Rejection under 35 U.S.C. § 102(b):

The first issue we consider concerns limitations in both independent claims 12 and 17. Claim 12 recites a visual subsystem which is “functionally coupled to said memory and defining a three-dimensional display area, that simulates said image for said user such that a three-dimensional visual representation of said product appears in said display area.” Claim 17 recites a similar limitation of “displaying the three-dimensional visual representation of the product in a three-dimensional display area.” As is clear from Appellants specification, and as discussed *supra*, the three dimensional representation refers to an image on a two dimensional screen, and not an image that occupies three dimensions. The claims also recite that the display area for the image occupies three dimensions. Thus, the scope of both independent claims 12 and 17 includes a three dimensional representation wherein a two dimensional image of a product is displayed in a three dimensional display area.

We find that Burke describes such a system. As discussed *supra* we find that Burke teaches displaying a three dimensional representation of a selected product on a cathode ray tube. As is known in the art, a cathode ray tube comprises a tube, a three dimensional object. Inside the tube there is a source of cathode rays that are emitted (projected) toward the front screen of the tube. Inside the front screen of the tube there is screen of material (typically phosphor) which is excited by the cathode ray to produce an image. This image is visible through the transparent front of the tube. Thus, a cathode ray tube presenting a three dimensional representation is a two dimensional image inside a three dimensional display area as claimed.

The second issue is directed to whether Burke teaches a monitor separate from the visual subsystem. Independent claim 17 does not contain a limitation directed to a monitor. Thus, the issue related to the three dimensional display area is the only issue with regard to the Examiner's rejection of claim 17. We find for the Examiner on this issue and sustain the Examiner's rejection of independent claim 17.

The second issue, focuses on the recitation, in claim 12, of "a monitor, functionally coupled to said processor unit, to display for viewing by said user, a selection including each said product." This limitation is separate from the recitation of a visual subsystem which contains a three dimension display area. Thus, the scope of claim 12 includes a visual subsystem and a separate monitor.

As discussed *supra*, we find that Burke teaches the claimed visual subsystem which presents three dimensional representations. However, we do not find that Burke teaches a separate monitor in addition to the cathode

ray tube, which provides a three dimensional representation. The Examiner supports the finding of a monitor in Burke by citing a passage in column 6. We find that this discussion in Burke is referring to the same display system as is used to present the three dimensional representation. Thus, we do not find that Burke teaches a separate monitor as recited in claim 12. Accordingly, we find for the Appellants on this issue and will not sustain the Examiner's rejection of claim 12 and claims 13 through 15 and 27 which are dependent thereon and are similarly rejected over Burke

B) Rejections under 35 U.S.C. § 103:

1) Rejection of claim 16

As stated *supra*, the preliminary issue with respect to the rejection of claim 16, is whether the rejection of independent claim 12 upon which claim 16 depends is properly rejected by the combination of the references. As discussed *supra* we do not find that Burke teaches all of the limitations of claim 12. Nor, do we find suggestion in Burke to include a separate monitor and visual subsystem to display three-dimensional images. The Examiner has not asserted nor do we find that Reisman teaches or suggests such a modification. As such, the issue as to whether Reisman is analogous art and teaches the limitations of claim 16 is moot, as we do not find that the combination of the references teaches the limitations of the independent claim 12, upon which claim 16 depends. Accordingly, we find for the Appellants and will not sustain the Examiner's rejection of claim 16.

2) Rejection of claims 21 through 26 and 28 through 33.

Initially, we note that Appellants have presented arguments directed to claims 21 through 26 and 28 through 33 as a group. However, as claims 21

through 26 are dependent upon claim 12 and claims 28 through 33 are dependent on claim 17, we will consider the claims as two groups. We group claims 21 through 26 together and claims 28 through 33 together.

2) a) Rejection of claim 21 through 26.

As discussed *supra* we do not find that the combination of Burke and Reisman teach the limitations of claim 12. The Examiner has not asserted nor do we find that Nagamitsu teaches or suggests such a modification. Though Nagamitsu teaches using two displays to present a three dimensional image (stereoscopic image), Nagamitsu does not teach that one of the displays is for a three dimensional representation and second for viewing a user selection. As such the issue of whether Nagamitsu in combination with Burke teach simulating an environment other than through visual means is moot as we find that the combination of the references do not teach the limitations of the independent claim (claim 12) upon which claims 21 through 26 depends. Accordingly, we find for the Appellants and will not sustain the Examiner's rejection of claims 21 through 26.

2) a) Rejection of claims 28 through 33.

As discussed *supra* we find that Burke teaches the limitations of independent claim 17. Thus, the remaining issue with respect to claims 28 through 33, is whether Nagamitsu in combination with Burke teaches simulating an environment other than through visual means as claimed. We select claim 28 as representative of this group of claims. Claim 28 is dependent upon claim 17 and further recites "the instructions further

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comprise approximating a sound of the product, and wherein the act of simulating the product further includes simulating the sound of the product.” Thus, the scope of the claims includes a simulation of sound in addition to the three dimensional visualization as recited in claim 17.

We find, as addressed *supra*, that Nagamitsu teaches a system to provide simulations of environments where actual sounds of the environment may be provided to the user. Thus, we find that Nagamitsu teaches simulating an environment other than through visual means. Accordingly, we consider the Examiner’s determination, that the combination of Burke’s virtual simulation of the shopping experience and Nagamitsu’s environmental simulation teaching, provides a visual and audio simulation, to be supported by ample evidence of record. We find for the Examiner and sustain the Examiner’s rejection of claim 28 through 33.

Conclusions

We consider the Examiner's rejection of claims 12 through 15 and 27 under 35 U.S.C. § 102(b) to be in error as we find that Burke does not teach a separate three dimensional display area and a monitor. We sustain the Examiner's rejection of claim 17 under 35 U.S.C. § 102(b) as we find that Burke does teach a three dimensional display area. We consider the Examiner's rejection of claims 16, and 21 through 26 under 35 U.S.C. § 103(a) to be in error as the additional references, Nagamitsu and Resiman, do not teach or suggest modifying Burke to include a separate three dimensional display area and a monitor. We sustain the Examiner's rejection of claims 28 through 33 as we find that Nagamitsu teaches simulating an environment other than through visual means.

Order

For the forgoing reasons, we will sustain the Examiner's rejection of claim 17 under 35 U.S.C. § 102(b) and claims 28 through 33 under 35 U.S.C. § 103. However, we will not sustain the Examiner's rejection of claims 12 through 15 and 27 under 35 U.S.C. § 102(b) or the rejection of claims 16 and 21 through 26 under 35 U.S.C. § 103. The decision of the Examiner is affirmed-in-part.

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

AFFIRMED-IN-PART

MURRIEL E. CRAWFORD)	
Administrative Patent Judge)	
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ANTON W. FETTING)	
Administrative Patent Judge)	

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FAY KAPLUN & MARCIN, LLP
150 BROADWAY, SUITE 702
NEW YORK NY 10038