IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

RICHARD H. STERN

APPLICATION MADE SPECIAL

Serial No.: 11/166,991

Examiner: MOSSER, K.M.

Filed: 27 June 2005

Art Unit: 3714

For: MENTAL THERAPY METHOD FOR CATHARSIS OF NEGATIVE FEELINGS

AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the fourth, non-final Office action mailed on 29 November 2007 (Paper No. 20071120), entry of the following amendments and remarks, and re-examination and reconsideration of the application, are respectfully requested. It is noted that this application has been made special by an order dated November 18, 2005.

CERTIFICATE OF FACSIMILE TRANSMISSION

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For Robert E. Bushnell
Reg. No. 27,774
IN THE CLAIMS

Pursuant to 37 CFR §121(c), the claim listing, including the text of the claims, will serve to replace all prior versions of the claims, in the application.

Please cancel claim 23 without prejudice or disclaimer of their subject matter, amend claims 1-3, 13, 14, 16-18, and 24, and add new claim 25 as follows:

1. (Currently Amended) A method for treatment of fear, anger, or negative thoughts or feelings of fear, anxiety, helplessness, powerlessness, or vulnerability, caused by a prior adverse interpersonal interaction, said method comprising the steps of:

   (1) causing to be visibly displayed to, or perceived by, a first person an image of an actual, living second person actually personally known to said first person, said first person having, in respect to said second person, because of an actual prior adverse interpersonal interaction between said first person and said second person, an initial level of fear, anger, or negative thoughts or feelings of fear, anxiety, helplessness, powerlessness, or vulnerability, as to which said first person desires said treatment;

   (2) causing to be visibly displayed to, or perceived by, said first person an image of an object having an actual potential for harming the second person; and

   (3) causing said image of said object to touch, become located within, or become near said image of said second person in a manner such that said object appears to harm said second person.

2. (Currently Amended) The method of claim 1, further comprising:

   (a) repeatedly monitoring said first person's level of fear, anger, or negative thoughts or feelings of fear, anxiety, helplessness, powerlessness, or vulnerability, by receiving and monitoring information representative of said first person's blood pressure, pulse rate, or sweating;
(b) comparing said information from before and after causing said image of an object to touch, become located within, or become near said image of said second person in a manner such that said object appears to harm said second person, whereby an comparison result is provided; and

(c) reiterating the step of causing said image of an object to touch, become located within, or become near said image of said second person in a manner such that said object appears to harm said second person, until said comparison result shows a predetermined reduction of said first person's blood pressure, pulse rate, or sweating.

3. (Currently Amended) The method of claim 1 wherein:

(a) prior to step 1 of claim 1, said first person has a first state of mind, said first state of mind characterized by thought patterns constituting or representative of fear, anger, or negative thoughts or feelings of fear, anxiety, helplessness, powerlessness, or vulnerability, or by a negative cathexis with respect to said second person; and

(b) after step 3 of claim 1, said first state of mind of said first person is transformed to a second state of mind of said first person, said second state characterized by thought patterns constituting or representative of a reduced level of said fear, anger, or negative thoughts or feelings of fear, anxiety, helplessness, powerlessness, or vulnerability, or by an at least partial discharge of said cathexis.

4. (Previously Presented) The method of claim 3 wherein said method further comprises transforming said first state of mind so that, in said second state of mind, said first person comes to feel that he or she has imposed retribution or vengeance on said second person, said transforming occurring without said first person consciously believing that his or her conduct has actually caused said second person to suffer an actual physical injury.
5. (Previously Presented) The method of claim 3 wherein at least part of each step is carried out by a machine.

6. (Original) The method of claim 5 wherein said image of a second person and said image of an object are each located on a computer display visible to said first person, said computer display operatively coupled to a programmable processing unit operatively coupled to a memory, said memory storing a computer program for carrying out said method of claim 5.

7. (Original) The method of claim 6 wherein said image of an object is embodied in an animated graphics file, said file embodying an audiovisual work that is performed on said computer display when said first person engages in a prespecified action on an input device operatively coupled to said processing unit.

8. (Original) The method of claim 6 wherein said image of an object is translated on said display so that said image of an object appears to touch or penetrate said image of said second person, and then said image of said second person is transformed so that said second person appears to be bleeding or sustaining a mutilation.

9. (Original) The method of claim 6 further comprising:
   a step of logging on to the Internet; and
   an Internet-implemented step of causing a payment to be made to a vendor; and
   wherein at least one step of said method comprises transmitting a signal over the Internet between the first person and the vendor.

10. (Previously Presented) The method of claim 6 wherein at least one step of said method is preceded, accompanied, or followed by an audible rendition of a predetermined
phrase, mantra, or incantation that the first person personally selected.

11. (Original) The method of claim 10 wherein said predetermined phrase, mantra, or incantation is selected with regard to helping overcome negative feelings caused by said prior adverse interpersonal interaction between said first person and said second person.

12. (Original) The method of claim 1 wherein at least one step of said method is preceded, accompanied, or followed by an audible rendition of a predetermined phrase, mantra, or incantation that is selected with regard to helping overcome negative feelings caused by said prior adverse interpersonal interaction between said first person and said second person.

13. (Currently Amended) A method for treating a victim of spousal abuse, said method comprising the steps of:

   (1) causing to be visibly displayed to, or perceived by, a first person an image of an actual second person, said second person a present or former spouse of said first person, said first person a victim of spousal abuse by said second person, said first person having a first mental state comprising feelings of fear, anxiety, powerlessness, vulnerability, or helplessness anger caused by said spousal abuse;

   (2) causing to be visibly displayed to, or perceived by, said first person an image of an object having an actual potential for harming the second person;

   (3) causing said image of an object to touch, become located within, or become near said image of said second person in a manner such that said object appears to harm said second person; and

   (4) transforming said first mental state of said first person to a second mental state comprising a reduction of said feelings of fear, anxiety, powerlessness, vulnerability, or helplessness anger.
14. (Currently Amended) The method of claim 13 wherein at least one step is preceded, accompanied, or followed by an audible rendition of a predetermined phrase that has been selected for use in treating a victim of spousal abuse, said phrase selected with regard to helping to alleviate feelings of fear, anxiety, powerlessness, vulnerability, or helplessness anger caused by spousal abuse.

Claim 15. (Canceled)

16. (Currently Amended) A machine adapted for use in treating anger or negative thoughts or feelings, or a negative cathexis, of a first person with respect to a second person, said machine comprising:

   a selection unit comprising means for permitting a first person to select a photographic image of an actual, living second person who is actually personally known to said first person and with respect to whom said first person has, because of actual, prior adverse interpersonal interactions between said first person and said second person, fear, anger, or negative thoughts or feelings, or a negative cathexis, for which said first person desires treatment;

   a person display unit that causes to be visibly displayed to, or perceived by, said first person said image of a second person;

   an object display unit for causing to be visibly displayed to, or perceived by, said first person an image of an object having an actual potential for harming said second person; and

   a translator unit for causing said image of an object to touch, become located within, or become near said image of said second person, in a manner such that said object appears to harm said second person;

   where said selection unit, said person display unit, said object display unit, and said translator unit cooperate to influence a reduction of said fear, anger, or negative thoughts or feelings, or an at least partial discharge of said negative cathexis.
17. (Currently Amended) The machine of claim 16 further comprising a determination unit for determining whether said first person has undergone a reduction of said fear, anger, or negative thoughts or feelings, or a reduction of said negative cathexis, and for again actuating an operation of said translation unit unless a reduction of said fear, anger, or negative thoughts or feelings, or a reduction of said negative cathexis, has occurred.

18. (Currently Amended) The machine of claim 16 further comprising a processing unit operatively coupled to a memory in which is stored a computer program for operating or effectuating said image display unit, said object display unit, said translator unit, and said determination unit.

19. (Original) The machine of claim 18 further comprising a sound system operatively coupled to said processing unit and, operatively coupled to said processing unit, an incantation unit for causing said sound system to make a predetermined phrase, mantra, or incantation audible during at least a portion of a time when said machine is operated.

Claims 20-23. (Canceled)

24 (Currently Amended). A machine configured to implement the method of claim 13, wherein the step of causing said image of an object to touch, become located within, or become near said image of said second person in a manner such that said object appears to harm said second person is performed by a programmed machine acting in response to signals from an input device operated by said first person, said method further comprising:

(a) repeatedly monitoring said first person's level of feelings of fear, anxiety, helplessness, powerlessness, vulnerability, or negative thoughts or feelings, by receiving and monitoring information representative of said first person's blood pressure, pulse rate, or
sweating:

(b) comparing said information from before and after causing said image of an object to touch, become located within, or become near said image of said second person in a manner such that said object appears to harm said second person, whereby an comparison result is provided; and

(c) reiterating the step of causing said image of an object to touch, become located within, or become near said image of said second person in a manner such that said object appears to harm said second person, until said comparison result shows a predetermined reduction of said first person's blood pressure, pulse rate, or sweating.

REMARKS

STATUS OF CLAIMS

Claims 1-14, 16-19, 23 and 24 are pending in the application. Claims 15 and 20 were previously canceled without prejudice or disclaimer of their subject matter, because of a restriction requirement. Claims 21 and 22 were canceled in the Amendment filed on 14 June 2007. By this amendment, claim 23 is cancelled, claims 1-3, 13, 14, 16-18, and 24 amended, and claim 25 added. Thus, claims 1-14, 16-19, 24 and 25 are pending in the application.

CLAIM OBJECTIONS

Claims 23 and 24 are objected to under 37 C.F.R. §1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

As initially presented, these claims read:

23. A machine having a memory which contains machine-readable instructions for performing the method of claim 1.


Claim 23 is now cancelled. Claim 24 is now amended to recite a method claim dependent from claim 13 and reciting as further limitations the limitations of claim 2. Claim 24, as amended, is a method claim that further limits the subject matter of a previous method claim, thereby obviating the office action’s above-stated objection under 37 C.F.R. §1.75(c). New claim 25 provides: “A storage medium encoded with machine-readable computer code adapted for performing the method of claim 24.” This claim depends from claim 24 but is in
Beauregard format. It does not repeat in haec verba the steps of the method of claim 24 (and claim 13 from which claim 24 depends), but that is unnecessary and if done would multiply the length of the claim from a line and a half to more than 30 lines, or by a factor of more than 20. A person of ordinary skill in the art, to whom the claim is addressed, would readily understand the subject matter and scope of the claim. There is no impropriety in having an article of manufacture claim depend from a method claim. Product-by-process claims do so and are acceptable. Moreover, this claim format is superior to rewriting verbatim the entire text of the base and intervening claim because in this format, the claim is not only shorter but the possibility of inadvertently or otherwise omitting any intervening claim limitation is precluded. See also In re Warmerdam, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994) (“5. A machine having a memory which contains data representing a bubble hierarchy generated by the method of any of Claims 1 through 4.’’), in which the Federal Circuit upheld a machine claim that depended from a method claim.

Claim 18 is amended hereinabove to change its dependency from claim 16 to claim 17, because the “said determination unit” has an antecedent in claim 17 but not in claim 16. The amendment cures a typographic error made in drafting the claim.

Claims 1, 2, 3, 13, and 16 are amended to provide more uniform and consistent description of the claimed subject matter. No new matter is introduced: Support for “anxiety” is found in paragraphs 0002, 0004, 0005, and 0065 of the original specification; support for “helplessness” in paragraphs 0005, 0041, 0044, 0052, 0061, and 0063; support for “powerlessness” in paragraphs 0005, 0041, 0044, 0052, and 0061; support for “vulnerability”
in paragraphs 0041, 0044, 0052, 0061, and 0063.

**CLAIM REJECTIONS**

I. **35 U.S.C. § 101 and § 112 ¶ 1 – utility**

A. ** Claims 1-14, 16-19 and 23-24**

Claims 1-14, 16-19 and 23-24 are rejected under 35 U.S.C. § 101 (office action, pp. 2-2) because the claimed invention is allegedly not supported by either a credible asserted utility or a well established utility. See also office action, p. 3 – 35 U.S.C. § 112 ¶ 1. The office action (Pp. 2-3) seeks to support the assertion of lack of utility as follows:

"*Does Venting Anger Feed or Extinguish the Flame?* Catharsis, Rumination, Distraction, Anger and Aggressive Responding", by Brad J. Bushman (hereinafter the Bushman article), shows a detailed study including 600 participants. The article acknowledges that catharsis theory is well-known in the psychological community but shows substantial evidence to conclude that venting anger/aggression does not result in a discharge of the negative feelings. On page 725, in the left hand column, second full paragraph, as study showing that questions as to the effectiveness of catharsis theory have been raised as early as 1959. In the rumination study group, the participants are allowed to visualize their antagonist (in this instance a fictitious partner) while hitting a punching bag. The study shows that this group of participants maintained the most negative energy or angry emotions at the conclusion of the experiment. This article clearly challenges the utility of catharsis treatments in their ability to relieve fear, anger, or other negative feelings a person has towards another. Given such evidence the examiner has concluded that the asserted utility of the instant invention is not credible.

The catharsis theory is about 2500 years old (as measured from Aristotle’s *Poetics*). As the Bushman reference (hereinafter "Bushman") itself concedes, the theory of catharsis has been supported by such eminent authorities as Freud and Breuer, and it still represents a majority view (albeit, in Bushman’s opinion, a wrong view). Moreover, as the Examiner
states in the office action, “The [Bushman] article acknowledges that catharsis theory is well-known in the psychological community.”

In *Bushman* Brad Bushman, then an associate professor of psychology at Iowa State University, criticizes the “widespread” confidence of others in the catharsis theory and “Freud’s therapeutic ideas on emotional catharsis.” See *Bushman* 725. Bushman is a self-professed gadfly, maverick, or “myth buster,” and he describes himself in these terms: “Ordinary people often hold beliefs that have no scientific validity. I like to challenge those beliefs.” See <http://www.las.iastate.edu/newnews/bushman0909.shtml>. For example, Bushman contends that use of sex in advertising does not sell merchandise, despite the advertising industry’s widespread contrary belief. *Id.*; see Anderson, C. A., & Bushman, B. J. (2001), *Effects of violent video games on aggressive behavior, aggressive cognition, aggressive affect, physiological arousal, and prosocial behavior: A meta-analytic review of the scientific literature*, PSYCHOLOGICAL SCIENCE, 12, 353-359 (this article is downloadable at <http://www.sitemaker.umich.edu/brad.bushman/files/01AB.pdf>).

In his capacity as professional myth buster, Bushman champions the theory of “cognitive neoassociation” (*Bushman* 725), on the basis of which he predicts (in the cited reference) that venting frustration or anger by pounding nails after a person has insulted the nail pounder will make the nail pounder more, rather than less, hostile or aggressive; and he points to experimental data allegedly supporting the conclusion. *Id.* He also points to data showing that students who “ruminated” for 20 minutes about a notional professor who treated a student unfairly reported that they were angrier than they were 20 minutes earlier before the
rumination began. *Id.* at 726.

Bushman’s own experimental work, described in the *Bushman* reference on which this rejection is based, was based on a non-random, biased, and therefore non-probative sample: 602 college students enrolled in his psychology courses, to whom he gave extra grade credit if they agreed to participate in his study; data from two women students were removed from the data sample because they were opposed to engaging in violent behavior. This is not a scientifically acceptable sample, and any resulting data is therefore suspect.

Bushman told the 600 students to write an essay on abortion (pro-choice or pro-life as the student preferred). Then Bushman returned the essay to its writer with negative ratings and adverse comments (one of which was “this is one of the worst essays I have read” – Bushman said that this comment incensed the students). Bushman showed one group of students a photograph he said was that of the imaginary negative critic of the essay, and told those students to hit a punching bag and think about the critic. He did not show the other group of students any photograph and just told them to think about increasing their physical fitness when they hit the punching bag. Bushman claims that the group of students shown the photographs stayed angry longer, despite their venting their anger at their critics by hitting the punching bag. Bushman concludes, “These results provide one more nail in the coffin containing catharsis theory.” *Id.* at 729.

There are at least two basic things wrong with using *Bushman* as a reference to show lack of utility of the claimed invention (apart from the biased sample).

1. The *Bushman* reference concedes (see pp. 724-25) that the catharsis theory is the
well accepted, establishment viewpoint. The PTO cannot conclude that catharsis theory is wrong for purposes of a § 112 rejection simply on the basis of the views of one side on a contested issue, much less on the basis of the minority side. It may somehow eventually be accepted that Bushman is right and Aristotle, Freud, and all the proponents of conventional wisdom are wrong. But the mere fact that there is a difference of opinion about the efficacy of a method (such as a medical regimen or drug) – where a substantial number (let alone, a majority, as here) of practitioners believe the method is efficacious and another substantial number of practitioners believe the opposite – does not mean that the method lacks utility for purposes of § 112.

The burden is on the PTO to show lack of utility under § 112, and that burden is not carried just by showing that a difference of opinion presently exists over efficacy or utility (especially where the view the PTO seeks to rely on is one opposed to conventional wisdom). See In re Brana, 51 F.3d 1560, 1566 (Fed. Cir. 1995) (“[T]he PTO has the initial burden of challenging a presumptively correct assertion of utility in the disclosure. Only after the PTO provides evidence showing that one of ordinary skill in the art would reasonably doubt the asserted utility does the burden shift to the applicant to provide rebuttal evidence sufficient to convince such a person of the invention's asserted utility.”).

The proper rule is that the PTO may reject under § 112 for inoperativeness only when accepted scientific theory clearly rejects the theory on which the claimed invention rests – for example, perpetual motion, which contravenes accepted thermodynamics and therefore is inherently implausible. See, e.g., Process Control Corp. v. HydReclaim Corp., 190 F.3d 1350,
1359 (Fed. Cir. 1999) (claims found inoperable because they require violating the principle of conservation of mass); *Newman v. Quigg*, 877 F.2d 1575 (Fed. Cir. 1989) (claims to a perpetual motion machine ruled inoperable). Therefore, *Bushman* does not carry for the PTO its burden under § 112.\(^1\) To rely on *Bushman* here is comparable to basing on the views of Newman in the *Newman* case an inoperability rejection of a claimed machine because the machine relies on the theory of conservation of energy.\(^2\) Junk science is not substantial evidence.

2. The second thing basically wrong with the PTO’s reliance on *Bushman* is that the reference does not address the same thing that the invention addresses: it is a case of apples and oranges – *Bushman* has an inappropriate, and thus unreliable, experimental model that does not correspond to the factual environment of the invention. Therefore, *Bushman* does not

\(^1\) There is no showing in the record that Bushman’s cognitive neoassociationist theory is generally accepted in the scientific community in preference to the Freudian catharsis theory. To the contrary, Bushman (at 725) concedes that the catharsis theory is generally accepted and that his “myth buster” views reflect a minority theory. Thus, in *In re TMI Litigation*, 193 F.3d 613 (3d Cir. 1999), the Third Circuit excluded as methodologically unreliable expert testimony that relied on a novel approach to air modeling. *Id.* at 669. The court noted that in formulating his “plume dispersion” hypothesis, the expert discarded standard and generally accepted models in favor of his novel model for which there was no indication of general acceptance within the scientific community. *A fortiori* generally accepted theories cannot be rejected as support for operability on the basis of theories without general acceptance.

\(^2\) The proper legal test was early indicated in *In re Gazave*, 379 F.2d 973 (CCPA 1967). The court held that in the usual case, as here, where the mode of operation alleged for the invention can be readily understood and conforms to known and generally accepted principles, operativeness is not questioned, and no evidence of operability is required. On the other hand, if the alleged invention seems clearly to conflict with a recognized scientific principle as, for example, where an applicant purports to have discovered a machine producing perpetual motion, the presumption of inoperativeness is strong and clear evidence is required to overcome it. *Id.* at 978.
show that this invention lacks utility. Bushman, if believed, shows that punching a punching bag while "ruminating" about a person at whom the bag puncher is angry or resentful (because the person unfavorably criticized the bag puncher's essay on abortion) is less effective in reducing the bag puncher's anger or resentment than is ruminating about increasing the bag puncher's physical fitness. The invention is about a form of treatment for an abused person (such as a victim of spousal abuse), in which such abuse-caused feelings as fear, anxiety, helplessness, powerlessness, and vulnerability are sought to be reduced. The treatment involves moving an image of a knife, axe, or the like on a screen so that it appears to strike and harm a screen image of the abusive person (such as the abusive ex-spouse). Whatever Bushman shows about resentful or petulant essay writers, it fails to show anything about the fears and anxieties that intimidated, battered spouses feel, even if Bushman is believed valid within the artificial, essay-resentment fact pattern that it addresses. It is junk science under Daubert v. Merrell Dow Pharmaceuticals, 509 U.S. 579 (1993), to use Bushman's experimental model to extrapolate from Bushman's petulant essay writers resentful of such criticism as "this is the worst essay I ever read" to this invention's treatment of intimidated, battered spouses afraid of husbands who beat them up. Bushman addresses a problem like a hangnail while the invention is concerned with, metaphorically, an abscess. What Bushman's experimental model rightly or wrongly terms catharsis therapy is not the kind of catharsis therapy with which the instant invention is concerned. Resentment over harsh criticism of a student's essay is not comparable to (and is not a proper experimental model for) feelings of fear, anxiety, helplessness, powerlessness, and vulnerability, as set forth in claims 1 and 13.
Therefore, Bushman's work cannot establish the inoperability of the instant invention or make a prima facie case of its inoperability for purposes of a rejection.

The inadequacy of Bushman's model for showing the inoperativeness or lack of utility of the present invention is comparable to what the Federal Circuit addressed in *Novartis Corp. v. Ben Venue Laboratories, Inc.*, 271 F.3d 1043, 1054, 60 U.S.P.Q.2d (BNA) 1836, 1844 (Fed. Cir. 2001). There, the Federal Circuit affirmed summary judgment of noninfringement because the patentee's expert's computer model could not properly defeat a noninfringement summary judgment where factual evidence was lacking to show that the expert's computer model accurately reflected the accused infringer's process. Here, Bushman's model of the petulant essay writer cannot be shown to accurately reflect the circumstances of the abused spouse.

Similarly, in *Alza Corp. v. Mylan Laboratories, Inc.*, 464 F.3d 1286, 1296-97, 80 U.S.P.Q.2d 1001, 1007-08 (Fed. Cir. 2006), the Federal Circuit upheld a noninfringement judgment because the patentee's evidence of infringement was based on a model or proxy for the factual setting of the alleged infringement that was not shown to mimic that factual setting. The Federal Circuit said that "one cannot simply proclaim without proof that he has constructed an apparatus capable of mimicking pertinent environmental variables of the GI tract." *Id.* Accordingly the Federal Circuit concluded that the patentee's evidence "is irrelevant absent evidence demonstrating that the in vitro system is a good model of actual in vivo behavior." *Id.* Bushman's model of the petulant student's essay, here, is to the circumstances of the present invention as was Alza's *in vitro* model to the defendant Mylan's
*in vivo* accused GI tract – there is no evidence that the essay model fits the abused-spouse circumstances of the case. The Bushman model therefore proves nothing relevant to this case.

Either of those two basic flaws in using *Bushman* to show lack of utility here would suffice to prevent basing a § 112 / § 101 rejection of this invention on it. The instant rejection is not supported and therefore should be withdrawn.

**B. Claims 3-11, 13-14 and 24**

Claims 3-11, 13-14 and 24 are rejected under 35 U.S.C. § 101 because the claimed invention is allegedly directed to non-statutory subject matter. The office action (p. 4) states:

The claims recite features which require that the person’s “state” will change from one of having negative feelings towards a second person, to one of reduced negative feelings. Such results are not concrete. In order to be concrete the result of the method must have a reasonable expectation of success. However, as shown by the Bushman article cited above, such a resulting change is state is not reasonably expected.

1. **Reasonable expectation of success**

The PTO has the burden of proof to show that the claimed method lacks “a reasonable expectation of success,” *see Fregeau v. Mosinghoff*, 776 F.2d 1034, 1038 (Fed. Cir. 1985), even assuming that this § 103 case-law language properly applies to operativeness. The PTO seeks to rely on the minority views of “myth buster” Bushman for this purpose. But Bushman concedes that the majority, conventional, established view is that catharsis therapy is efficacious. Bushman imagines that he is pounding nails into the coffin of the conventional view and asserts that he has done so. *Bushman* 729. But Bushman’s “cognitive neoassociationism” theories have not yet supplanted the generally accepted catharsis theory. The applicant is
therefore entitled to rely on the conventional wisdom. Citation of Bushman’s minority views does not satisfy the PTO’s burden to prove that the claimed method lacks “a reasonable expectation of success.” Compare Process Control Corp. v. HydReclaim Corp., 190 F.3d 1350, 1359 (Fed. Cir. 1999) (claims found inoperable because they require violating the principle of conservation of mass); Newman v. Quigg, 877 F.2d 1575 (Fed. Cir. 1989) (claims to a perpetual motion machine ruled inoperable).

2. Incorrect equation of concreteness to reasonable expectation of success

This part of the office action equates lack of concreteness with lack of reasonable expectation of success. However, the office action cites no case so stating. Examination of Federal Circuit case-law shows that this phrase is associated with obviousness determinations under § 103, not with determinations of nonstatutory subject matter under § 101. Reasonable expectation of success is not a proper basis for a nonstatutory subject matter rejection and lack of reasonable expectation of success does not establish lack of concreteness.

3. The claimed subject matter is concrete

More generally, the reduction of negative feelings in claim 3 and other rejected claims is indeed concrete, because what the invention does corresponds to the ordinary, common sense meaning of “concrete.” The AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE (4th ed. 2000) defines concrete as follows:

1. Of or relating to an actual, specific thing or instance; particular: had the concrete evidence needed to convict. 2. Existing in reality or in real experience; perceptible by the senses; real: concrete objects such as trees.
Rejected claim 3 is directed to treating a first person for fear, anger, etc. For the first person to have her fear, anxiety, etc. treated is useful. Reduction of negative emotions reduces stress, which is a health risk. See specification, [0004]. The specification specifically points out, "By the same token, elimination or lessening of the negative thoughts and feelings that cause such stress and their adverse physiological effects is a useful, concrete, and tangible result." Id. Rejected independent method claim 13 is also directed to treatment for fear, anxiety, and other stressful emotions, and the same considerations apply to it. In addition, fear and other stressors or negative feelings and their reduction are associable with such measurable physical parameters as pulse rate, blood pressure, etc. See specification, ¶¶ [0022], [0058].

The claimed subject matter is concrete in the sense that it is not abstract. By the same token, the subject matter is tangible, which as the Bilski case points out is just another antonym of abstract. Fear and stress are real world, non-abstract problems and their treatment is a practical benefit to the first person, not a mere abstraction. The claimed treatment is in no way like converting BCD numbers to binary numbers (as in the Benson case) or like the Pythagorean Theorem, which are typical abstract ideas. The claimed subject matter is thus concrete and tangible, and it is useful and beneficial to the user. In addition, the rejected

3 "Negative catheysis causes stress and is harmful to the person having or subject to it. Stress can lead to medical problems such as ulcers, acute gastritis and diarrhea. Onsets of erythrocytosis, inflammatory bowel disease, heart attacks and ischemia are influenced by stress. In fact, there is clinical evidence that psychic or emotional stress and anxiety are associated with precipitation of overt ischemic heart diseases and sudden death. See E.D. Eaker, et al., "Anger and Hostility Predict the Development of Atrial Fibrillation in Men in the Framingham Offspring Study," Circulation, 2004:109(10):1267-1271...." (other citations omitted).
claims do not completely preempt all ways of treating the condition addressed.

Claim 24 is amended to be a method claim dependent from claim 13, and it is concrete for the reasons stated in the preceding paragraph. New claim 25 is directed to a storage medium for computer instructions for performing the method of claim 24, such as a floppy disk, hard disk, CD, or flash memory. Such articles of manufacture are clearly concrete and tangible because they are physical objects.

4. The applicant notes for the record that the current office action contains no other § 101 nonstatutory subject matter rejections than those addressed above. For example, there is no rejection on the ground that the claimed subject matter is not within the “useful Arts” or “technological arts,” or is otherwise not the type of subject matter toward which the patent statute or clause is directed. Cf. Joseph E. Seagram & Sons. v. Marzall, 180 F.2d 26, 28 (D.C. Cir. 1950). The applicant has therefore addressed all § 101 nonstatutory subject matter rejections that are in the case.

II. 35 U.S.C. § 112

The office action rejects claims 1-14, 16-19 and 23-24 under 35 U.S.C. 112, first paragraph (p. 4, ¶ #3). The Office action states that:

“since the claimed invention is not supported by either a credible asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention.”

The PTO has the burden of proof on showing non-entitlement to a patent on non-utility or inoperativeness grounds. This rejection rests entirely on the Bushman reference to establish
lack of utility. Accordingly, this is the same rejection as before, restated. The applicant incorporates here by reference the same arguments he made above. For the reasons stated in section I, the minority "cognitive neoassociation" theory stated in Bushman and the experimental data there presented do not carry the PTO's burden to show no "credible asserted utility or a well established utility for the reasons set forth above." Following the conventional wisdom of catharsis theory is not like arguing for perpetual motion, and therefore the PTO does not meet its burden of proof.

III. Claim Rejections under 35 U.S.C. § 103 - obviousness

Claims 1, 13, 16, 18, 23 and 24 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over "Virtual Voodoo Dolls" (web posting of "bumhat", September 11, 2002).

The September 11, 2002, posting to the "Halfbakery" says, in substance:

**virtual voodoo dolls**  virtual dolls you can scan pics of your boss into, then stick pins into ... A useful way to sublimate your rebellious homicidal impulses without fear of actual bodily harm or consequent prosecution. Scan in a picture of your bosses face and / or body, and the software creates a 3D virtual doll that you can manipulate as you like. And of course stick pins into. ...Of course all the technology research would be into realistic screaming / writhing algorithms

A. **bumhat Is Non-Enabling and Therefore Not a Prior Art Reference**

The September 2002 posting by bumhat to the Halfbakery (hereinafter *bumhat*) is not a legitimate prior art reference at all. *bumhat* is an email sent to a bulletin board called the Halfbakery, on which members post ideas (largely inchoate) about what they think would be "neat" technology if someone else would invent or develop it. *bumhat* does not even purport
to contain an enabling disclosure and there is no reason to believe that a person of ordinary
skill in the art could learn how to carry out the instant invention by reading *bumhat*. In effect,
*bumhat* says, “Wouldn’t it be nice if someone else would go to the trouble of inventing a
device of this kind?” That is not prior art. It is simply what the name of the website – the
Halfbakery – suggests that it is: a site for posting half-baked ideas and rants, and not for
Teaching disclosures.

B. *bumhat* Does Not Teach or Suggest the Invention

At most, *bumhat* can be relevant only for what it teaches. *bumhat* does not teach or
suggest this invention. At most, *bumhat* teaches that it would be a nice idea if someone
invented a device such that it created a virtual three-dimensional doll with a face based on that
of a scanned picture of the user’s boss, where the doll could be manipulated as the user liked
and where it writhed and screamed in accordance with technology later to be devised. (Much
of what *bumhat* teaches is irrelevant to this invention. The writhing and screaming elements
may be disregarded, because the instant invention does not provide for the second person’s
writhing and screaming. In addition, the present invention does not involve a three-

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4 For example, *bumhat* says nothing about using the mouse or cursor device to move the
harmful object against the image of the abusive person. *bumhat* says nothing about ascertaining
or measuring the amount of cathartic effect or how to do so. *bumhat* says “Scan in a picture of
your bosses face and / or body, and the software[magically?] creates a 3D virtual doll that you can
manipulate as you like,” but *bumhat* provides no information about how to do this. See
Transclean Corp. v. Bridgewood Services, Inc., 290 F.3d 1364, 62 USPQ2d 1865 (Fed. Cir.
2002); Bristol-Myers Squibb Co. v. Ben Venue Laboratories, Inc., 246 F.3d 1368, 1374, 58
USPQ2d 1508 (Fed. Cir. 2001) (“To anticipate, the reference must ... enable one of skill in the
art to make and use the claimed invention.”).
dimensional doll.) What *bumhat* does teach is far short of this invention.

The office action correctly points out that *bumhat* does not teach (or, indeed, even mention or suggest) the “first person having, in respect to said second person, because of an actual prior adverse interpersonal interaction between the first person and said second person, an initial level of fear . . . as to which said first person desires treatment.” That is a major omission. Because *bumhat* is not concerned with an initial level of fear, anxiety, feelings of vulnerability, and the like, it does not address reducing or lowering that level. Nor does it address measuring or determining the amount of such reduction of that level in order to determine whether to re-actuate the simulated mutilation sequence or instead to stop. Those are important differences between *bumhat* and the instant invention. Like an anticipation rejection, an obviousness rejection must satisfy the all-elements rule. *In re Lowry*, 32 F.3d 1579, 1584-85, 32 U.S.P.Q.2d 1031 (Fed. Cir. 1994) (both obviousness and anticipation rejections reversed because the cited reference did not disclose all elements of the claimed device). *bumhat* does not satisfy the all-elements rule.

Thus, unlike the rejected claims, *bumhat* does not even purport to teach or suggest a form of therapy for persons in need of it because of their having suffered psychological damage (e.g., fear, anxiety, etc. caused by spousal abuse or other adverse interpersonal relations). Instead, *bumhat* only seeks to provide a “useful way to sublimate your rebellious homicidal impulses without fear of actual bodily harm or consequent prosecution.” Putting aside the fact that *bumhat* is simply frivolous and without the serious or humane purpose of alleviating suffering, *bumhat*’s proclaimed method of sublimating rebellious homicidal
impulses is not, and does not suggest, a method of reducing fear, anxiety, feelings of helplessness, powerlessness, vulnerability, etc. Indeed, there is no basis for assuming that the rebellious, homicidal user of buumhat is afraid, anxious, vulnerable-feeling, etc. The one stated indication does not suggest the other. Even if bumhat were a legitimate prior art reference, therefore, since § 100(b) authorizes patents on new uses of old structures and methods, bumhat would not make the instant invention unpatentable, because nothing in bumhat would suggest to a person of ordinary skill in the art the instant invention’s new use. There is no rational connection between sublimating rebellious homicidal impulses and alleviating fear and anxiety, such that the former makes the latter obvious, much less makes the particular implementation taught here obvious.

The office action concedes that bumhat “does not explicitly teach said first person having, in respect to said second person, because of an actual prior adverse interpersonal interaction between the first person and said second person, an initial level of fear, anger, or negative thoughts or feelings as to which said first person desires treatment, as in claims 1, 13 and 16.” It then states, in an attempt to brush aside or explain away this fatal omission, that “the concept of using a voodoo doll to perform malicious acts [against] a person with whom one has had a negative experience is impeccably well-known in modern culture.” Even assuming, arguendo, that voodoo is impeccably well known, however, does not make amended claim 1’s “initial level of feelings of fear, anxiety, helplessness, powerlessness, or vulnerability, as to which said first person desires said treatment” known or obvious. There is no rational nexus. There is no explanation of why a person knowing about voodoo would be
motivated to devise a form of therapy for treating “feelings of fear, anxiety, helplessness, powerlessness, or vulnerability, as to which said first person desires said treatment” that caused an image of, e.g., an axe to appear to chop off the top of the head on an image of an abusive ex-spouse (as in the embodiment of the present invention illustrated in the animated gif available at <http://docs.law.gwu.edu/facweb/claw/Ax2Head.gif>) in order to provide such therapy. And that is only one of the claimed elements of the invention that bumhat neither contains nor suggests.

In fact, bumhat does not even mention (nor suggest) any of the following claim limitations, among others, of the instant patent application (as amended):

- Claim 1 – “feelings of fear, anxiety, helplessness, powerlessness, vulnerability, caused by a prior adverse interpersonal interaction” (preamble); “feelings of fear, anxiety, helplessness, powerlessness, vulnerability, as to which said first person desires said treatment” (¶ 1)
- Claim 2 – “repeatedly monitoring said first person's level of feelings of fear, anxiety, helplessness, powerlessness, vulnerability, by receiving and monitoring information representative of said first person's blood pressure, pulse rate, or sweating” (¶ a)
- Claim 3 – “thought patterns constituting or representative of feelings of fear, anxiety, helplessness, powerlessness, vulnerability, or by a negative cathexis” (¶ a)
- Claim 10 – use of a mantra or incantation
- Claim 11 – selecting mantra or incantation for particular problem of patient (see
also claims 12 and 14 with like limitations)

- Claim 13 – “said first person having a first mental state comprising feelings of fear, anxiety, powerlessness, vulnerability, or helplessness” (¶ 1); “transforming said first mental state of said first person to a second mental state comprising a reduction of said feelings of fear, anxiety, powerlessness, vulnerability, or helplessness” (¶ 4)

- Claim 14 – “said phrase selected with regard to helping to alleviate feelings of fear, anxiety, powerlessness, vulnerability, or helplessness”

- Claim 16 – “a translator unit for causing said image of an object to touch, become located within, or become near said image of said second person, in a manner such that said object appears to harm said second person” and “where said selection unit, said person display unit, said object display unit, and said translator unit cooperate to influence a reduction of said fear, anger, or negative thoughts or feelings, or an at least partial discharge of said negative cathexis”

- Claim 18 – a determination unit for determining whether the operation of the device has caused a reduction of fear, etc., such that it is no longer necessary to reactuate the translation unit (to cause another simulated injury)

- Claim 19 – sound system for mantra or incantation

- Claim 26 – “repeatedly monitoring said first person’s level of feelings of fear, anxiety, helplessness, powerlessness, vulnerability, or negative thoughts or feelings, by receiving and monitoring information representative of said first person’s blood pressure, pulse rate, or sweating.”
Because *bumhat* does not consider or mention treatment or therapy issues, it does not embody any transformation as these claims do (e.g., claim 13’s step of “transforming said first mental state of said first person to a second mental state comprising a reduction of said feelings of fear, anxiety, powerlessness, vulnerability, or helplessness”). At best, *bumhat* proposes to provide harmless amusement – “to sublimate your rebellious homicidal impulses without fear of actual bodily harm or consequent prosecution.” It does not propose any transformation that treats the user’s fear, anxiety, etc..

As to these many gaps in *bumhat*, the office action alludes to no teaching, suggestion or motivation in the prior art that would have led one of ordinary skill to modify *bumhat*’s teachings to arrive at the claimed invention. Nor does the office action give any explanation articulating why a person of ordinary skill in the art would have been motivated to make the modifications to arrive at the claimed invention by incorporating structures that could fill in these many gaps. As the Federal Circuit instructed in *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006), “rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” Accord *KSR Int’l Co. v. Telex Inc.*, 127 S. Ct. 1727, 1741 (2007). See also *In re Sang-Su Lee*, 277 F.3d 1338, 1343-45 (Fed. Cir. 2002); *Gechter v. Davidson*, 116 F.3d 1454, 1457-60 (Fed. Cir. 1997). The bare statement that voodoo is impeccably known is no substitute for “articulated reasoning with some rational underpinning,” per *In re Kahn*.

The Office has failed to meet its burden to sustain its § 103 rejection, and the rejection
should therefore be withdrawn.

IV. Response to Arguments

In its Response to Arguments section, the office action maintains that a change of state of a person’s mind or mental processes is not a transformation of state for purposes of § 101. However, the office action makes no specific additional rejection of any claim in the case on this ground. Accordingly, the applicant can respond to the statement only by reincorporating herein by reference the applicant’s prior remarks on the subject that he made in the previous Amendment.

The applicant further points out that mental states of persons and concomitant thought patterns are embodied in measurable electrical signals that are representative of such states. As the specification points out (paragraph 0065) (emphasis added):

It is widely accepted that memories and other thought patterns are embodied in electric and chemical signals that circulate or are transmitted from place to place within the human brain. Indeed, a considerable body of information exists on how different forms of mental activity can be imaged on electronic brain scan displays, and how changes in such activity upon occurrence of certain stimuli or mental activities can be viewed on such brain scan displays. See, e.g., M.S. George et al., “Advances in Brain Imaging: An Overview of What the Primary Psychiatrist Needs to Know,” [citation omitted]. *It is thus considered that the operation of the invention causes one set of such signals within the brain to be transformed into a different set of such signals, where the first set is representative of one physical state (characterized, for example, by fear or anger based on memories of prior experiences) and the second set is representative of a different physical state (characterized, for example, by a reduction in such fear or anger).*

The instant invention involves the same sort of transformation of signals representative of one state (for example, a signal representative of a high pulse rate in turn representative of a
high fear level) to signals representative of a second state (for example, a signal representative of a lower pulse rate in turn representative of a lower fear level) as the Federal Circuit considered in such cases as *Arrhythmia Research Tech., Inc. v. Corazonix Corp.*, 958 F.2d 1053 (Fed. Cir. 1992); *In re Abele*, 684 F.2d 982 (CCPA 1982); *In re Taner*, 681 F.2d 787 (CCPA 1982); and a fortiori *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368 (Fed. Cir. 1998). The office action’s statement, “However, the concept of altering the state of an object refers to making a physical transformation, such as curing rubber,” ignores the Federal Circuit’s extension or clarification of that concept in *In re Schrader*, 22 F.3d 290 (Fed. Cir. 1994), to apply to transformations of subject matter, as in such cases as those cited in the preceding sentence of this paragraph. See *Schrader*, 22 F.3d at 294:

These claims all involved the transformation or conversion of subject matter representative of or constituting physical activity or objects. In *Arrhythmia*, it was electrocardiograph signals representative of human cardiac activity; in *Abele*, it was X-ray attenuation data representative of CAT scan images of physical objects; and in *Taner*, it was seismic reflection signals representative of discontinuities below the earth’s surface. Schrader’s claims, except for incidental changes to a “record,” do not reflect any transformation or conversion of subject matter representative of or constituting physical activity or objects.

See also id. at 295 n.12 (citations, ellipsis, and internal quotation marks omitted):

[The *Cochrane* passage] has sometimes been misconstrued as a rule or definition requiring that all processes, to be patentable, must operate physically upon substances. Such a result misapprehends the nature of the passage. Thus, it is apparent that changes to intangible subject matter representative of or constituting physical activity or objects are included in the definition.

Moreover, the instant claims specifically contemplate a change of physiologic state that is measurable in terms of specific physical parameters such as pulse rate or blood pressure.
Thus, claim 2 provides: "repeatedly monitoring said first person's level of feelings of fear, anxiety, helplessness, powerlessness, or vulnerability, by receiving and monitoring information representative of said first person's blood pressure, pulse rate, or sweating" (¶ a) and then continuing other steps or else stopping depending on the result of the monitoring. Claim 24 is similar. While other claims do not expressly recite these parameters as limitations, nonetheless the states that are transformed are states that are in fact associated with the same measurable physical parameters, as the specification makes clear. See, e.g., ¶ 0065. Thus, the changes of state of the present invention are transformations of the same kind as the Schrader case explained and the Arrhythmia case involved. By the same token they are statutory subject matter.

No other issues remaining, reconsideration and favorable action upon all of the claims now present in the application is respectfully requested. Should any questions remain unresolved, the Examiner is requested to telephone the applicant's undersigned attorney.

No fee is incurred by this amendment.
Respectfully submitted,

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