Brain State Technologies, L.L.C. (“applicant”) filed a use-based application to register the mark BRAIN STATE CONDITIONING, in standard character format, for services ultimately identified as “training services in the field of neurofeedback,” in Class 41. Applicant disclaimed the exclusive right to use the words “Brain” and “Conditioning.”

The Trademark Examining Attorney refused to register applicant’s mark under Section 2(e)(1) of the Trademark Act of 1946, 15 U.S.C. §1052(e)(1), on the ground that
applicant’s mark is merely descriptive. According to the Examining Attorney, “[b]ecause the Applicant’s services measure the present condition of the user’s brainwave activity or a fluctuating situation due to an external stimulus, the term [BRAIN STATE CONDITIONING] is merely descriptive of neurofeedback services.”¹

To support the descriptiveness refusal, the Examining Attorney submitted the following evidence:

1. The “Nuerofeedback” entry from the Reference.com website derived from Wikipedia. “Neurofeedback” or “neurotherapy” presents the user with realtime feedback of brainwave activity to enable the user to control his/her brainwave activity.

2. An abstract of article by Richard Brown entitled “What is a Brain State” published in Philosophical Psychology (2006) retrieved from the ASSC Publications website (http://eprints.assc.calthtech.edu). The relevance of this article is that it used the term “Brain States” as a unitary term and as a term of art referring to the relationship between the mind and brain. “[B]rain states are patterns of synchronous neural firing, which reflects the electrical face of the brain.”

3. An excerpt from an article entitled “Brain state and contrast sensitivity in the awake visual thalamus” published in the Nature Neuroscience website (nature.com) on September 10, 2006. This article also used the term “Brain State” as a unitary term in concluding that “[n]euronal responses to visual stimuli depend on both the nature of stimulus and brain state.”

4. An abstract of an article by Martin Bohner and S. Hui entitled “Brain state in a convex body”

¹ Examining Attorney’s Brief, unnumbered page 3.
retrieved from the Scholars’ Mine Research Repository website at the University of Missouri-Rolla (http://scholarsmine.umr.edu). The abstract discusses the study of the brain-state-in-a-box model. For our purposes, the importance of this abstract is that “brain state” is a unitary term.

5. An abstract from an article by Marc Salucci, Ph.D, entitled “Is Consciousness a Brain State?” (swif.uniba.it).² “Brain state” is used a unitary term to describe mental states.

6. An article about “Identity Theory” in The Internet Encyclopedia of Philosophy (iep.utm.edu) discussing “brain states” in terms of “the relationship between mind and body.” “Brain state” is used as a unitary term of art to explain that every mental state has a unique brain state. A person who works in this field is referred to as a “brain-state theorist.”


8. The abstract from Patent No. 6488617 entitled “Method and device for producing a desired brain state.”

9. The abstract from Patent No. 4545388 entitled “Self-normed brain state monitoring.” This patent is for “a method and apparatus for monitoring the brain states of a patient during a medical procedure.”

10. The entry for “altered states of consciousness” from The Skeptics Dictionary (http://skepdic.com) has the following definition of “altered states of consciousness” incorporating “brain state”:

² While the article is in Italian, the abstract is in English. We find that the article is admissible because it would be available to practitioners in the field of neurofeedback.
An altered state of consciousness is a state of consciousness that differs significantly from baseline or normal consciousness often identified with a brain state that differs significantly from the brain state at baseline or normal consciousness.

On the other hand, applicant contends that the Examining Attorney did not meet her burden of proving that BRAIN STATE CONDITIONING is merely descriptive because her evidence was in the nature of scholarly works and, therefore, they do not show how the relevant purchasing public would perceive BRAIN STATE CONDITIONING.

[S]imply hearing the word “state” used with the words “brain” and “conditioning” does not immediately project to the relevant purchasing public an idea of Applicant’s services, except that such services involve the brain.  

In addition, “[t]he word ‘state’ is an amorphous word having various meanings. For example, this word may refer to a geographic region, such as the state of New York.”

The essence of applicant’s argument is that applicant’s mark is comprised of the three words “brain,” “state,” and “conditioning”; and that while the words “brain” and “conditioning” are descriptive, the word

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3 Applicant’s Brief, p. 8.
4 Id.
“state,” in and of itself, does not convey any information regarding the nature of applicant’s services.5

A term is merely descriptive if it immediately conveys knowledge of a significant quality, characteristic, function, feature or purpose of the products and services it identifies. In re Gyulay, 820 F.2d 1216, 3 USPQ2d 1009, 1009 (Fed. Cir. 1987). Whether a particular term is merely descriptive is determined in relation to the goods and services for which registration is sought and the context in which the term is used, not in the abstract or on the basis of guesswork. In re Abcor Development Corp., 588 F.2d 811, 200 USPQ 215, 218 (CCPA 1978); In re Remacle, 66 USPQ2d 1222, 1224 (TTAB 2002). In other words, the question is not whether someone presented only with the mark could guess what the products and services are. Rather, the question is whether someone who knows the products and services will understand the mark to convey information about them. In re Tower Tech, Inc., 64 USPQ2d 1314, 1316-1317 (TTAB 2002); In re Patent & Trademark Services Inc., 49 USPQ2d 1537, 1539 (TTAB 1998); In re Home Builders Association of Greenville, 18 USPQ2d 1313, 1317 (TTAB 1990); In re American Greetings Corp., 226 USPQ 365, 366 (TTAB 1985).

5 Applicant’s Reply Brief, p. 5.
“On the other hand, if one must exercise mature thought or follow a multi-stage reasoning process in order to determine what product or service characteristics the term indicates, the term is suggestive rather than merely descriptive.” In re Tennis in the Round, Inc., 199 USPQ 496, 497 (TTAB 1978). See also, In re Shutts, 217 USPQ 363, 364-365 (TTAB 1983); In re Universal Water Systems, Inc., 209 USPQ 165, 166 (TTAB 1980).

Accordingly, we start our analysis of the registrability of BRAIN STATE CONDITIONING by inquiring whether that term describes a characteristic, quality, function or purpose of “training services in the field of neurofeedback,” not whether we can guess what the services are by looking at the mark. Contrary to applicant’s contention, the word “state” does not form a commercial impression separate and apart from the term “brain state.” “Brain state” is a unitary term referring to the relationship between the patient’s brain, mental state, and physical and mental health. A patient seeking neurofeedback training knows that he/she is seeking to control their mental state to achieve better and more efficient control of their mental state. Accordingly, the relevant purchasers will not go through the mental process of parsing the term BRAIN STATE into its component parts,
but will regard it as a unitary term. Thus, a patient seeking neurofeedback training is going to perceive the mark BRAIN STATE CONDITIONING as directly imparting the information that the services involve “conditioning” (i.e., modifying)\(^6\) their “brain state” (i.e., mental state).\(^7\)

Applicant’s substitute specimen corroborates our finding. The text of the advertisement reads, in relevant part, as follows:

**Brain State Conditioning™** is a method of balancing and harmonizing the brain.

In view of the foregoing, we find that the term BRAIN STATE CONDITIONING when used in connection with “training services in the field of neurofeedback” is merely descriptive.

Decision: The refusal to register is affirmed.

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\(^7\) Even if BRAIN STATE CONDITIONING is descriptive only to those in the field, and not the average consumer, such a finding of descriptiveness is sufficient to support a finding that the mark is unregistrable under Section 2(e)(1) of the Trademark Act of 1946. *In re Randall and Hustedt*, 226 USPQ 1031, 1032 (TTAB 1985); *Exxon Corp. v. Motorgas Oil & Refining Corp.*, 219 USPQ 440, 443-445 (TTAB 1983).