

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TETSUO SAKUMA and AKIHIRO MORI

Appeal No. 97-2776
Application No. 08/252,363¹

ON BRIEF

Before WEIMAR, NASE, and CRAWFORD, Administrative Patent Judges.
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's rejection of claims 24 through 29, 31 and 32, which are all of the claims pending in this application.²

¹ Application for patent filed June 1, 1994.

² Subsequent to the final rejection, the appellants filed an amendment (Paper No. 11) proposing to cancel claims 23 and 30, amend claims 24 through 27 and 29, and add claims 31 and 32. The examiner subsequently entered that amendment and withdrew the rejection under 35 U.S.C. § 112, second paragraph.

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We REVERSE and enter new grounds of rejection pursuant to
37 CFR § 1.196(b).

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BACKGROUND

The appellants' invention relates to a method for alleviating pain by contacting a portion of the human body with a magnetic material. Claims 31 and 32 are representative of the subject matter on appeal and a copy of those claims, as they appear in the appendix to the appellants' brief, is attached to this decision.

The prior art references of record relied upon by the examiner as evidence of obviousness under 35 U.S.C. § 103 are:

Nakayama	3,921,620	Nov. 25, 1975
Griffin et al. (Griffin)	4,587,956	May 13, 1986

Lin et al., "Geophysical Variables and Behavior: XXVII Magnetic Necklace: Its Therapeutic Effectiveness on Neck and Shoulder Pain: 2. Psychological Assessment," Psychological Reports, April 1985, pp. 639-649 (Lin)

An additional reference of record relied on by this Board is:³

Markoll	5,387,176	Feb. 7, 1995 (filed Apr. 13, 1992)
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³ This reference was cited by the examiner in Paper No. 4 and a copy is of record in the application file.

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Claims 24 through 29, 31 and 32 stand rejected under 35 U.S.C. § 101 as lacking utility.

Claims 24 through 29, 31 and 32 stand rejected under 35 U.S.C. § 103 as being unpatentable over Nakayama in view of Lin and Griffin.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the § 101 and § 103 rejections, we make reference to the final rejection (Paper No. 7, mailed December 12, 1995) and the examiner's answer (Paper No. 19, mailed November 27, 1996) for the examiner's complete reasoning in support of the rejections, and to the appellants' brief (Paper No. 16, filed September 10, 1996) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the

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examiner. As a consequence of our review, we make the determinations which follow.

The Utility Issue

We do not sustain the rejection of claims 24 through 29, 31 and 32 under 35 U.S.C. § 101 as lacking utility.

With regard to the statutory requirement of 35 U.S.C. § 101 that an invention be useful, a specification must contain a disclosure of utility for the claimed invention. The initial burden of establishing a *prima facie* case that a specification is inadequate in this regard rests with the examiner and requires presentation of a reason to doubt the asserted utility. As the Federal Circuit stated in In re Brana, 51 F.3d 1560, 1566, 34 USPQ2d 1436, 1441, (Fed. Cir. 1995)(citations omitted):

From this it follows that the 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.

See also, In re Langer, 503 F.2d 1380, 1391-92, 183 USPQ 288, 297 (CCPA 1974).

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In this instance the Examiner has not met this initial burden. The teachings of the prior art as a whole indicate that application of magnetic fields to body parts to alleviate pain associated with that body part has been undertaken. See the following references of record: Nakayama, Markoll and Griffin, the teachings of which are set forth infra in the new grounds of rejection under 35 U.S.C. § 103. The examiner's reliance on Lin is insufficient evidence, in our opinion, to show that a person having ordinary skill in this art would doubt the objective truth of the claimed method. While the effect appears to be condition-dependent, such as strength of magnetic field, time of application or means of contact, that does not negate the underlying expectation of success in the application of magnetic fields to alleviate pain.

The Obviousness Issue

We do not sustain the rejection of claims 24 through 29, 31 and 32 under 35 U.S.C. § 103 as being unpatentable over Nakayama in view of Lin and Griffin.

In this rejection, the examiner stated (final rejection, p. 5) that "[a]lthough a field strength of 2-20 gauss is not

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disclosed [by Nakayama] it is the examiner's position that the device of Nakayama has a field strength in that range." We do not agree. While it is true that the field strength of Nakayama's device would be reduced to 20 gauss at some distance from the device, the claims on appeal are not that broad. The claims on appeal require, inter alia, contacting a portion of the human body having pain with a magnetic material and applying a magnetic field of 2 to 20 gauss to that portion of the body until the pain is reduced. Thus, the claims on appeal require that the magnetic material contact the human body while applying a magnetic field of 2 to 20 gauss. While Nakayama does teach contacting a portion of the human body for treatment with a magnetic material, Nakayama does not teach that the magnetic material would apply a magnetic field of 2 to 20 gauss to that portion of the body. Since all the limitations of claims 24 through 29, 31 and 32 are not taught or suggested by the prior art as applied by the examiner, we do not sustain this rejection.

New grounds of rejection

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Under the provisions of 37 CFR § 1.196(b), we enter the following new grounds of rejection.⁴

Claims 24, 25, 27, 28, 29 and 31 are rejected under 35 U.S.C. § 103 as being unpatentable over Nakayama in view of Markoll.

Nakayama discloses a magnetic medical treatment device for efficiently causing magnetic flux to act on a human body. The magnetic medical treatment device comprises a plurality of magnets so arranged that the same polarity poles of the magnets contact a selected part of a human body. Nakayama states that his invention is applicable to magnetic medical treatment devices such as a wrist band, belly-band, pillow, bed, pad and plaster which magnetically treat an affected part of a human body.⁵ Additionally, Nakayama teaches that the increase rate of flux density varies depending upon the arrangement of magnets, the space between magnets and the material, size, shape and thickness

⁴ We note that claim 26 has not been subjected to a new ground of rejection since the prior art of record does not establish that it was known to contact a portion of the human body with magnetic material contained in fibers of a cloth or in a resin.

⁵ See column 1, lines 19-28, of Nakayama.

of the ferromagnetic metal plates. Thus, when Nakayama's invention is applied to a magnetic medical treatment belly-band, it is necessary to select suitable magnets and ferromagnetic metal plates suitable for particular applications taking the above factors into consideration.⁶

Markoll discloses the treatment of acute diseases or conditions, as from a sports injury, of the musculoskeletal system excluding fractures with magnetic field therapy. Markoll states that an important characteristic of his invention is that the field not be greater than 20 gauss.⁷ In Example 1, Markoll discloses treating a patient who had a recent (acute) injury to the left shoulder. The symptoms in the left shoulder were described as "pain with limitation of movement" which persisted for several weeks. Normal treatment included pain medication (analgesics) and ice packing which did not provide relief. Following 18 magnetic therapy treatments, complete return to an asymptomatic state with no further pain and a full range of motion were effected, with no reported recurrence of symptoms.

⁶ See column 8, lines 60-68 of Nakayama.

⁷ See column 1, lines 44-45, and column 2, lines 51-52, of Markoll.

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In Examples 2 and 3, Markoll discloses treating two patients who had recent onset of right and left elbow pain at the lateral epicondyle (tennis-elbow) which was acute in nature, having been sustained within the past two months. Both patients being professionals, they under took all medical modalities that were available, without relief. One patient could not rest his elbow on a cushion without noting severe pain. Both patients responded significantly after 18 magnetic therapy treatments and have resumed normal working and sports activities without recurrence of symptoms to date.⁸

After the scope and content of the prior art are determined, the differences between the prior art and the claims at issue are to be ascertained. Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966).

Based on our analysis and review of Nakayama and claims 24, 25 and 31, it is our opinion that the only differences are:
(1) applying a magnetic field of 2 or more to 20 or less gauss, and (2) applying that magnetic field to the portion of the body until the pain is reduced.

⁸ See column 4, lines 9-39, of Markoll.

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With regard to these differences, it is our opinion that it would have been obvious to one of ordinary skill in the art at the time of the appellants' invention to have modified Nakayama's magnetic medical treatment device to apply a low intensity magnetic field not greater than 20 gauss to relieve pain as suggested and taught by Markoll.

Dependent claim 27 recites that the magnetic field is 15 gauss or less. Dependent claim 28 further limits the magnetic field to 10 gauss or less. In view of Markoll's teaching of applying a low intensity magnetic field not greater than 20 gauss, it is our view that the level of the magnetic field applied is an obvious matter of designer's choice. See In re Kuhle, 526 F.2d 553, 188 USPQ 7 (CCPA 1975).

Dependent claim 29 adds to independent claim 31 the limitation that the body is contacted with the S-pole of the magnetic material. As set forth above, Nakayama teaches that the magnets are arranged so that the same polarity poles of the magnets contact the selected part of the human body. Since the magnets have only two poles, it is our determination that it would have been further obvious to one of ordinary skill in the

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art at the time of the appellants' invention to have contacted the selected part of the human body with the S-pole of the magnets such being a matter of designer's choice. See In re Kuhle, supra.

Claim 32 is rejected under 35 U.S.C. § 103 as being unpatentable over Nakayama in view of Markoll, as applied above with respect to claim 31, and further in view of Griffin.

Griffin discloses a magnetic therapeutic device for humans and animals. Griffin states that strained and sprained muscles, bruised tissues and stiff or arthritic joints are common problems in both humans and animals. Conventionally these are treated by applying heat to the body part in some way, for example, by hot, wet compresses, electric heating pads, diathermy machines or hot water baths or boots. Instead, Griffin teaches to treat these common problems with his magnetic therapeutic device wherein all the magnets are polarized in the same direction, that is, all the N-poles are on one side of the wrapper, and all the S-poles are on the other. The device is applied first to a joint by turning it to the N-pole configuration mode shown in Figure 5 with the N-poles facing inwardly until pain is relieved, after which it

may be reversed and applied in the S-pole configuration mode shown in Figure 6 with the S-poles facing inwardly. Griffin states that he has found a very substantially different therapeutic effect when the device is applied in the N-pole mode as shown in Figure 5 on the one hand; or in the S-pole mode as shown in Figure 6 on the other hand. Although, the exact reason is not fully understood, the N-mode configuration has a sedator effect, reduces pain, relieves muscle spasms, increases joint motility, mobilizes calcium, and lowers the pH in the affected tissue; and the S-pole mode stimulates circulation, speeds healing time, strengthens ailing tissues, and increases the pH toward a normal, healthy, slightly acid condition.⁹ Griffin discloses that while optimum results appear to be obtainable in the 200 to 600 gauss per square inch range inasmuch as significant and improved therapeutic benefits are obtainable in substantially less time than is possible with conventional treatments, that flux ranges below 200 gauss per square inch may prove beneficial for some patients with certain kinds of illnesses and ailments.¹⁰ Griffin states that most of the major acute injuries had pain relief in 48 hours where the magnetic

⁹ See column 6, lines 46-59, of Griffin.

¹⁰ See column 7, line 53, to column 8, line 4, of Griffin.

device was worn 16 hours per day and that where the device was worn 24 hours per day, the patients reported pain relief in one to two days.¹¹ Lastly, Table III shows different kinds of chronic injuries, including arthritis, for which the device of Griffin was tested. All the tested patients were in constant pain and were first treated with the device in N-pole mode until pain was relieved. The device was then reversed to the S-pole mode, resulting in increased circulation, strengthening of the tissues, and promoting healing.¹²

Based on our analysis and review of Nakayama and claim 32, it is our opinion that the only differences are: (1) applying a magnetic field of 2 or more to 20 or less gauss, and (2) applying that magnetic field to the portion of the body until the arthritic pain is reduced.

With regard to these differences, it is our opinion that it would have been obvious to one of ordinary skill in the art at the time of the appellants' invention to have modified Nakayama's magnetic medical treatment device to apply a low intensity

¹¹ See column 11, lines 4-10, of Griffin.

¹² See column 11, lines 11-34, of Griffin.

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magnetic field not greater than 20 gauss to relieve pain as suggested and taught by Markoll and to have used the device to reduce arthritic pain as suggested by Griffin.

Claim 29 is rejected under 35 U.S.C. § 103 as being unpatentable over Nakayama in view of Markoll, as applied above with respect to claim 31, and further in view of Griffin.

Dependent claim 29 adds to independent claim 31 the limitation that the body is contacted with the S-pole of the magnetic material. As set forth previously, Nakayama teaches that the magnets are arranged so that the same polarity poles of the magnets contact the selected part of the human body. Further, as set forth above, Griffin teaches to first treat the patient with the magnetic device in the N-pole mode (e.g., the body is contacted with the N-pole of the magnetic material) and then treating the patient in the S-pole mode (e.g., the body is contacted with the S-pole of the magnetic material). It is our opinion that it would have been further obvious to one of ordinary skill in the art at the time of the appellants' invention to have contacted the selected part of the human body

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with the S-pole of the magnets as suggested and taught by Griffin.

CONCLUSION

To summarize, the decision of the examiner to reject claims 24 through 29, 31 and 32 under 35 U.S.C. § 101 is reversed; the decision of the examiner to reject claims 24 through 29, 31 and 32 under 35 U.S.C. § 103 is reversed; and new rejections of claims 24, 25, 27, 28, 29, 31 and 32 under 35 U.S.C. § 103 have been added pursuant to provisions of 37 CFR § 1.196(b).

This decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b) (amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53131, 53197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides that, "A new ground of rejection shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that the appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of

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rejection to avoid termination of proceedings (§ 1.197(c)) as to
the rejected claims:

(1) Submit an appropriate amendment of the claims
so rejected or a showing of facts relating to the
claims so rejected, or both, and have the matter
reconsidered by the examiner, in which event the
application will be remanded to the examiner. . . .

(2) Request that the application be reheard under
§ 1.197(b) by the Board of Patent Appeals and
Interferences upon the same record. . . .

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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).

REVERSED; 37 CFR § 1.196(b)

ELIZABETH C. WEIMAR)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
JEFFREY V. NASE)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
)	
MURRIEL E. CRAWFORD)	
Administrative Patent Judge)	

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APPENDIX

31. A method for alleviating pain in a portion of a human body which comprises contacting that portion of the body with a magnetic material and applying a magnetic field of 2 or more to 20 or less gauss to that portion of the body until the pain is reduced.

32. A method for alleviating arthritic pain in a portion of a human body which comprises contacting that portion of the body with a magnetic material and applying a magnetic field of 2 or more to 20 or less gauss to that portion of the body until the arthritic pain is reduced.

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APJ NASE

APJ CRAWFORD

APJ WEIMAR

DECISION: **REVERSED**
37 CFR § 1.196(b)

Prepared By: Delores A. Lowe

DRAFT TYPED: 01 Dec 97

FINAL TYPED: