

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

INNOVATIVE PATENTS, L.L.C. and	:	
FORCEFIELD, LLC,	:	
	:	
Plaintiffs,	:	
	:	
v.	:	C. A. No. 07-680-MPT
	:	
BRAIN-PAD, INC.,	:	
	:	
Defendant.	:	

**MEMORANDUM ORDER**

**INTRODUCTION**

In this patent matter, Innovative Patents LLC and Forcefield LLC (collectively, “Forcefield”) allege that Brain-Pad, Inc. (“Brain-Pad”) infringes U.S. Patent No. 7,234,174 (“the ‘174 patent”).<sup>1</sup> Brain-Pad counterclaims for, *inter alia*, declaratory judgment that the ‘174 patent is invalid and unenforceable.<sup>2</sup> On December 17, 2009, the court conducted a *Markman*<sup>3</sup> hearing on the parties’ respective constructions of several disputed terms of the asserted claims. This order sets forth the court’s construction of those claims.

**THE COURT’S CLAIM CONSTRUCTION**

At Wilmington, this 13th day of January, 2010, having reviewed the papers submitted with the parties’ proposed claim constructions, heard oral argument, and having considered all of the parties arguments (whether or not explicitly discussed below);

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<sup>1</sup> See D.I. 1

<sup>2</sup> D.I. 38 at 9.

<sup>3</sup> *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995).

IT IS ORDERED, ADJUDGED, and DECREED that the disputed claim language in asserted claims of the '174 patent, as identified by the parties, shall be construed consistent with the tenets of claim construction set forth by the United States Court of Appeals for the Federal Circuit in *Phillips v. AWH Corp.*,<sup>4</sup> as follows:

1. *sweatband*

Forcefield's proposed construction is "a narrow band of absorbent material worn around the forehead or wrist to absorb perspiration, especially by participants in sports."

Brain-Pad's proposed construction is "a device adapted to be worn about and for absorbing sweat from a human head."

The court rejects both parties' proposed construction and determines this phrase means: "a band of absorbent material worn around the forehead to absorb perspiration." Use of the terms "narrow" and "especially by participants in sports" would improperly import limitations from the specification into the claim.<sup>5</sup> Incorporating use

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<sup>4</sup> 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*).

<sup>5</sup> See *Phillips*, 415 F.3d at 1323 ("[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.").

As to "narrow," this word never appears in the '174 patent, and nothing in the intrinsic evidence requires the sweatband to have this characteristic. As to "especially by participants in sports," while the context of athletic activity is frequently employed in the specification to illustrate preferred embodiments, other passages from the specification show that the invention may be suitable for other uses as well. See '174 patent, 3:25-27 ("The present invention is an improved, protective sweatband designed to be worn on the head, upper legs, lower legs, or wrists and forearms of the user."); '174 patent, 6:1-4 ("Likewise, in order to render the sweatband effective for usage in a variety of applications, both the insert and sweatband itself may be of a variety of widths, tailored to the portion of the head intended to be protected by same."). More importantly, dependent claim 7 lists a number of specific activities in which the invention may be utilized. Not all of these activities necessarily involve sports. See '174 patent, 8:50-55 (including skiing, horseback riding, roller skating, motorcycling, and snowmobiling). In any case, the limitation in claim 7 suggests that claim 1 is not so

around the wrist is equally inappropriate as contradictory to the plain meaning of claim 1, which states that the sweatband is “designed to be placed around the *head* of the user . . . .”<sup>6</sup> Brain-Pad’s proposed construction would permit use anywhere on a human head, while the claim itself clearly describes placement only “from the forehead to the back of the head.”<sup>7</sup>

## 2. *relatively thin in nature*

Forcefield’s proposed construction is “an insert with a thin cross-section to protect the user from injury, the thickness of the insert varying according to need and thin enough to accomplish the purposes of the invention (i.e. to provide a non-burdensome, lightweight means to protect the athlete).”

Brain-Pad’s proposed construction is “undefined and indefinable thickness, except perhaps to the extent the insert’s thickness is less than its length and its width.”

The court rejects both parties’ proposed construction and determines this phrase means: “the thickness of the insert, varying according to need, i.e., to better protect the user.” The court does not consider this claim indefinite. The specification states that “[t]he thickness *of the insert* may vary according to need, *but in all instances*, the insert functions to significantly improve the absorption and dissipation of primary forces to better protect the user.”<sup>8</sup> Thus, while the insert’s thickness may vary from application to

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limited, and may encompass other activities outside this group. *See Phillips*, 415 F.3d 1315 (“[T]he presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.”) (citation omitted).

<sup>6</sup> ‘174 patent, 8:22-23 (emphasis added).

<sup>7</sup> ‘174 patent: 8:23.

<sup>8</sup> ‘174 patent, 7:58-61 (emphasis added).

application, in no case may it be so thin that its protective function is lost. The court rejects Brain-Pad's secondary dimensional construction because the patent never discusses, let alone requires, specific dimensions of the insert. Forcefield's construction, on the other hand, includes purposes not properly attributable to the insert itself. The specification mentions "lightweight" and "non-burdensome" only in relation to the apparatus as a whole, not to the insert itself.<sup>9</sup>

### 3. *curved in configuration*

Forcefield's proposed construction is "the insert is compliant so it curves to conform to the shape of the user's head while in use."

Brain-Pad's proposed construction is "preformed, arcuate and having first and second ends as shown and described in connection with inserts 16 and 20 of Figures 1 and 2."

The court rejects both parties' proposed constructions and determines this phrase means: "preformed, arcuate and having first and second ends." Forcefield's construction incorrectly suggests that the insert is curved in shape only when applied to a substrate, e.g., a human head. Examination of the plain meaning of the claim language in light of the specification undermines this construction. The specification

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<sup>9</sup> See '174 patent, Abstract ("In total, the invention provides a novel, lightweight means to protect the athlete, while effectively functioning to absorb perspiration."); 5:26-29 ("[T]he present invention . . . provides a lightweight and non-burdensome means to absorb and dissipate a substantial portion of the impact forces associated with collisions."); 6:11-13 ("It is a further object of the invention to provide protective sweatbands that are lightweight, cool and comfortable to wear and use, and relatively inexpensive to manufacture.").

invariably describes the insert as curved *without* reference to placement on the head.<sup>10</sup>

Indeed, the patent never explicitly describes the shape of the insert when in use.

Forcefield further asserts that the insert is compliant and thus should conform to the shape of the head while in use. A compliant body, however, may still hold its shape when no force is applied. The court rejects Brain-Pad's construction for its improper reliance on the figures in defining the claim.<sup>11</sup>

#### 4. *intended area*

Forcefield's proposed construction is "at least one insert can be positioned in a variety of places within the sweatband, including covering the entire circumference of the head to protect the head from injury in any direction."

Brain-Pad's proposed construction is "the insert covering less than the entire circumference of the head."

The court rejects both parties' proposed constructions and determines this phrase means: "at least one insert can be positioned in a variety of places within the sweatband, including covering the entire horizontal circumference of the head." The court rejects Brain-Pad's construction because the '174 patent does not require the

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<sup>10</sup> See '174 patent, 5:15-17 ("[A] three to five inch curved section of padding material is located in the forehead area in the preferred mode of manufacture."); 5:51-54 ("With regard to the enhanced embodiments of the present invention, the crown of the head may be protected by a . . . curved two inch piece of foam or semi-rigid polymer."); 6:35-37 (describing Figure 1 as "indicating [the] general size and configuration of the foam or polymeric protective insert therefor."); 6:40-42 (providing the same description with regard to Figure 2).

<sup>11</sup> See, e.g., *Gart v. Logitech, Inc.*, 254 F.3d 1334, 1342 (Fed. Cir. 2001) (noting that "drawings [depicting the preferred embodiment] are not meant to represent 'the' invention or to limit the scope of coverage defined by the words used in the claims themselves.").

insert to cover less than the entire circumference of the head. Although the specification mentions “strategic placement” of the insert in certain applications, this does not amount to a clear intention to limit the claim scope.<sup>12</sup> In the absence of an explicit limitation on the scope of “an intended area,” the court construes this claim to allow full horizontal circumferential coverage.<sup>13</sup> Forcefield’s construction would incorporate protection from injury *in any direction*. As previously noted, however, the sweatband of claim 1 is designed to be worn from the forehead to the back of the head. Thus, while the insert is capable of affording full *horizontal* protection to the user, protection from *any* direction, e.g., from above, is beyond the scope of claim 1.

#### 5. *consistent memory*

Forcefield’s proposed construction is “the apparatus insert is a soft, relatively thin, compliant material that has a memory of its shape in that it retains its manufactured shape for a very long period of time, and returns to its manufactured shape in a consistently short period of time after deformation and dissipation of forces during impact.”

Brain-Pad’s proposed construction is “insert material impact restoration

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<sup>12</sup> See *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (“[T]his court has expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment. Even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.”) (internal quotations and citations omitted).

<sup>13</sup> See *Abbot Labs. v. Baxter Pharma. Prods.*, 334 F.3d 1274, 1281 (Fed. Cir. 2003) (“[A]n indefinite article ‘a’ or ‘an’ in patent parlance carries the meaning of ‘one or more’ in open-ended claims containing the transitional phrase ‘comprising.’”) (citing *KCJ Corp. v. Kinetic Concepts, Inc.*, 223 F.3d 1351, 1356 (Fed. Cir. 2000)).

characteristic which is invariable.”

The court rejects both parties’ proposed constructions and determines this phrase means: “consistently returns to its manufactured shape after deformation.” Because the patent fails to limit--or even mention--the amount of time in which the insert must return to its manufactured shape, the court declines to incorporate such a limitation into its construction.

#### 6. *semi-rigid*

Forcefield’s proposed construction is “the apparatus insert is manufactured using a semi-rigid polymeric material in that the polymeric material has viscoelastic properties.”

Brain-Pad’s proposed construction is “neither rigid nor flaccid.”

The court rejects both parties’ proposed constructions and determines this phrase means: “neither stiff nor pliable.” The court’s construction is informed by the modifier “semi,” which indicates that the intended material is not stiff but exhibits some degree of flexibility. The court is further guided by claim 2, which describes a “soft, pliable padding material.”<sup>14</sup> Use of this phrase in claim 2 suggests that a soft, pliable material would not meet the requirements of claim 3. The court declines to incorporate “viscoelastic properties,” a term of art not mentioned in the claim or the specification, into its construction.

#### 7. *apertures*

Forcefield’s proposed construction is “openings that allows air to pass through

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<sup>14</sup> ‘174 patent, 8:36.

the apparatus functioning to allow cooling.”

Brain-Pad’s proposed construction is “any openings in the insert through which air may pass, regardless of the type or orientation of the openings.”

The court rejects both parties’ proposed constructions and determines this phrase means: “any openings in the insert, regardless of type or orientation.” The claim as construed would thus read: “The apparatus as described in claim 1, wherein the insert comprises any openings in the insert, regardless of type or orientation, which function to allow air to pass therethrough.”

Forcefield’s construction incorporates a cooling purpose into the claim. Nowhere, however, does the ‘174 patent *require* apertures to perform this function. Apertures could function to make the device more lightweight and less burdensome, or, depending on their orientation, might also serve to enhance the absorption and dissipation of impact forces. More importantly, the function of apertures is spelled out *in the claim itself*, i.e., “to allow air to pass therethrough.”<sup>15</sup> The court declines to limit this claim any further.

  
UNITED STATES MAGISTRATE JUDGE

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<sup>15</sup> ‘174 patent, 8:45-46.