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#### IN THE UNITED STATES DISTRICT COURT FOR DISTRICT OF NEW JERSEY

INTERNATIONAL DEVELOPMENT

Civil Action No. 3:09-CV-02495-GEB

Plaintiff,

v.

SIMON NICHOLAS RICHMOND AND ADVENTIVE IDEAS, LLC

Defendants.

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### **DEFENDANTS' REPLY BRIEF ON CLAIM CONSTRUCTION**

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### I. INTRODUCTION.

Defendants Adventive Ideas LLC and Simon Nicholas Richmond (collectively, "Defendants") submit this Reply Brief in further support of the proper construction of the disputed terms of the claims of U.S. Patent Nos. 7,196,477 ("477 patent") and 7,429,827 ("827 patent") and in rebuttal to the contentions on claim interpretation currently presented by Plaintiff International Development LLC ("Plaintiff" or "IDC") in IDC's Opening Brief.

Defendants' proposed constructions are proper and well-supported by the intrinsic evidence, including claim language itself, the patent specification and prosecution history, and extrinsic evidence that may be freely consulted, such as ordinary and technical dictionaries. Defendants' constructions are further consistent with relevant definitions in the National Electric Code ("NEC" or "Code"), a standard for electrical construction enacted in virtually all states of the United States. By contrast, IDC's proposed constructions of the claims are unsupported by either the intrinsic or extrinsic evidence that may be freely consulted and are inconsistent with relevant definitions in the Code. As such, IDC's proposed claim constructions should be rejected.

For the reasons stated in Defendants' Opening Brief, Defendants respectfully repeat their request that the declaration of IDC's proferred expert, Dr. Laurent, should not be considered, since Dr. Laurent has no experience in the relevant art of solar powered garden lights and thus is unqualified to testify regarding how a person skilled in the art would construe the claims. In the event this Court receives the declaration and/or testimony of Dr. Laurent, Defendants respectfully request the opportunity to submit testimony of the inventor, Simon Richmond, who is skilled in the art, in rebuttal.

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### II. ARGUMENT.

# A. The National Electric Code's Definitions for the Terms in Dispute Should be Given Great Weight.

The National Electric Code ("NEC" or the "Code"), which is an electrical standard applied to building electrical construction throughout the United States, includes definitions for many of the terms in dispute in this case. When a state enacts a safety code such as the National Electric Code as a standard, it has the force of law, of which the Court can take judicial notice. *See Getty Petroleum Marketing, Inc. v. Capital Terminal Col*, 391 F. 3d 312, 326-7 (1<sup>st</sup> Cir. 2004) ("many safety codes are enacted as municipal ordinances or state administrative regulations, and consequently have the force of law.")

The Code has been enacted into law as a standard in virtually all states of the United States including, among others, New Jersey (the *situs* of this action and the state in which Defendants reside) and Texas (the original state in which IDC brought suit and the state in which IDC resides).<sup>1</sup> *See Brown v. Jersey Central Power and Light Co.*, 163 N.J.Super. 179, 197, 394 A.2d 397, 406 (N.J. Super. A.D. 1978) (noting designation of the "National Electrical Code of 1975" as the statewide controlling electrical construction code in New Jersey, citing N.J.S.A. 52:27D-133 and N.J.S.A. 2A:14-1.1). *See also* Texas Statutes, Title 8, Ch. 1305 *et* seq. (adopting the National Electrical Code as a state-wide standard.)

It is acknowledged that the Code is not legally binding as applied to solar garden lights,

<sup>&</sup>lt;sup>1</sup> The code has also been enacted as a standard in the District of Columbia (the Nation's capital) and Virginia (the location of the United States Patent and Trademark Office). The only states not adopting the Code as a statewide standard are Arizona, Hawaii, Illinois, Kansas, Louisiana, Michigan, Mississippi, Missouri and New York. *See* Exhibit 16 to the Supplemental Declaration of Theodore F. Shiells, which is a list summarizing the states' adoptions of the Code as a state-wide standard. The list of Exhibit 16 is summarized from pages from the National Electrical Installation Standards website, "neca-neis.org," attached to the Shiells Declaration as Exhibit 17, showing the electrical standards adoption information for each state.

because such lights are not installed in a building.<sup>2</sup> However, persons skilled in the electrical engineering arts would undoubtedly be aware of the Code and its definitions. In fact, the Standard Handbook for Electrical Engineers devotes an entire chapter to wiring designs for commercial and residential building in accordance with National Electric Code. *See* Exhibit 19 to Shiells Supplemental Declaration, which includes the table of contents of first page of Section 19, discussing the requirements of the National Electric Code. Accordingly, it is respectfully submitted that the definitions in the Code should be given great weight by this Court as to how a person skilled in the art of designing electrical devices would have understood those terms.

The Code provides definitions for many of the important terms used in the claims of '477 and '817 patents at issue in this case. Relevant excerpts for from the Code, including the definitions in Article 100, are attached to the Shiells Declaration as Exhibit 18. As pertinent here, these include the following:

<u>Accessible</u> (as applied to wiring methods): Capable of being removed or exposed without damaging the building structure or finish or not permanently closed in by the structure or finish of the building.<sup>3</sup>

<u>Accessible, Readily (Readily accessible</u>): Capable of being reached quickly for operation, renewal, or inspections without requiring those to whom ready access is requisite to climb over or remove obstacles or to resort to portable ladders, and so forth.

<sup>&</sup>lt;sup>2</sup> The Underwriter's Laboratory is an independent product safety certification organization that also publishes standards for various products. *See* Shiells Supp. Decl., Exhibit 19. The Underwriter's Laboratory regularly refers to the National Electric Code in its UL standards for various lighting products, including portable luminaires and luminaires using light emitting diodes. *See* Shiells Supp. Decl., Exhibit 20. No Underwriter's Laboratory standards for self-powered solar garden lights have been found.

<sup>&</sup>lt;sup>3</sup> Another definition for "accessible" (as applied to equipment) states: "Admitting close approach; not guarded by locked doors, elevation of other effective means." This other definition is not deemed relevant, however, because of the low voltages of solar lights and because switches are integral parts of a wiring system deposed at the terminus of the wires, and their purpose is to functionally connect or disconnect the wires, to allow or disallow current to flow through the wires. In any event, if this other definition was considered, it would support a location behind an easily removable obstruction designed to allow access, providing the obstruction is not locked.

Exposed (as applied to wiring methods): On or attached to the surface or behind panels designed to allow access.<sup>4</sup>

Lamp or lamps: A light source.

See Code at 70-28, definition of "luminaire," Exhibit 19 to Shiells Suppl. Decl.<sup>5</sup>

The pertinent definitions in the Code are discussed in more detail below, in rebuttal of the

definitions for those terms proposed by IDC and its proferred expert, Dr. Laurent.

### B. "At Least Two Lamps of Different Colours."

Defendants maintain their position that this simple phrase simply means what it says; "at

least two lamps that each generate a different colour," and that the term "lamp" is simply used in

its ordinary sense as "a device that generates light." Ex. 15, Joint Statement Under L.Pat.R. 4.3,

Ex. A at 2; Ex. 10, Defendants' L.Pat.R. 4.2 definitions at 25.

By contrast, IDC proposes the following convoluted construction, which adds numerous

extraneous limitations not found in the claim:

At least two lighting device *packages*, each capable of producing a single colour of light that is different from that which is produced by any other of said lighting device *packages*.

(Emphasis added.)

<sup>&</sup>lt;sup>4</sup> Another definition for "exposed" (as applied to live parts) states: "Capable of being inadvertently touched or approached nearer than a safe distance by a person. It is applied to parts that are not suitably guarded, isolated, or insulated." This other definition is not deemed relevant because, because of the low voltages of solar lights and because switches are integral parts of a wiring system deposed at the terminus of the wires, and their purpose is to functionally connect or disconnect the wires, to allow or disallow current to flow through the wires. In any event, if this other definition was considered, it would support a location behind an easily removable obstruction designed to allow access, since such an easily removable obstruction is not a suitable guard and because the easy removal of that obstruction would permit any parts inside to be touched.

<sup>&</sup>lt;sup>5</sup> The Code does not include a separately listed definition of "lamp." However, in the Code's definition of "luminaire," the Code clearly uses the term "lamp or lamps" to mean "a light source," as follows:

<sup>&</sup>lt;u>Luminaire</u>: A complete lighting unit consisting of *a light source such as a lamp or lamps*, together with the parts designed to position the light source and connect it to the power supply. It [the luminaire] may also include parts to protect the light source or the ballast or to distribute the light. A lampholder is not a luminaire. (Code, at 70-28, definition of "luminaire") (emphasis added)

IDC's proposed construction is inconsistent with the Code, adds extraneous "package" limitation that does not exist in patents in suit, is inconsistent with the intrinsic and extrinsic evidence and should be rejected.

### 1. The Code Defines "Lamp or Lamps" as "A Light Source."

In the Code's definition of "luminaire," the Code clearly defines the terms "lamp or lamps" to mean "a light source," *without* the additional parts required to mount it, to connect it to power, or to protectively enclose it. *See* Code, at 70-28, Exhibit 18 to Shiells Supp. Decl. (stating "a light source such as a lamp or lamps," in the definition of "luminaire"). As the definition of "luminaire" shows, a "luminaire" requires many parts in addition to the "light source," i.e., "parts designed to position the light source," parts to "connect it to the power supply" and parts "to protect the light source." However, a "lamp" is simply "a light source," devoid of the additional parts required of a "luminaire."

# 2. Defendants' Proposed Construction of "Lamp" Is Consistent with the Code.

As pointed out by Defendants in their Opening Brief, the ordinary meaning of "lamp" is "a device that generates light," a meaning consistent with the Code's definition of "lamp" as "a light source." Using the Code's alternate but substantially equivalent language, the meaning of the claims phrase at issue would become "at least two light sources that generate light of different colours."

### 3. IDC's Proposed Definition of "Lamp" as Having an Extraneous "Package" Limitation Is Inconsistent with the Code's Definition of "Lamp."

IDC proposes to construe the term "lamp" used in the claims of the '477 and '827 patents as "a lighting device *package*" (emphasis added), which IDC contends encompasses "light emitting element(s)" *and* with a "*package*" including "means for mounting the package onto the

lighting device" *and* "leads" ( i.e., wires), that connect the light emitting element to electric power *and* a "self-contained . . . bulb type enclosure." (IDC Opening Brief, at 8-9 and 11). IDC's proposed construction is inconsistent with how the Code uses the term "lamp" (as well as being inconsistent the meaning of "lamp" in view of the intrinsic evidence, as will be discussed below) and should be rejected.

As the following comparison shows, rather than being an appropriate construction of the term "lamp," which the Code defines as simply "a light source," the definition that IDC is proposing is essentially the Code's definition of an entire "*luminaire*," which is defined to include many parts *in addition* to a "light source such as a lamp":

Defendants'	Code Definition of	IDC's Proposed	Code Definition of
Definition of	"lamp"	Definition of "lamp"	"luminare":
"lamp"			
"lamp" A "device that generates light" or "a light source"	A light source. (Code, at 70-28, definition of "luminaire", Shiells Supp. Decl. Exhibit 18)	"Light emitting element(s)" together with a "package" including "means for mounting the <i>package</i> onto the lighting device" and "leads", i.e., wires, that connect the light emitting element to electric power, and "self- contained bulb type enclosure." (IDC Opening Brief, at 8-9 and 11) (Emphasis	A complete lighting unit consisting of a light source such as a lamp or lamps, together with the parts designed to position the light source and connect it to the power supply. It [the luminaire] may also include parts to protect the light source or the ballast or to distribute the light. (Code, at 70-28, definition of
		added).	"luminaire", Shiells
			Supp. Decl. Exhibit 18)

IDC' proposed construction is completely inconsistent with the Code's use of "lamp" as merely being "a light source" and would incorrectly construe the term "lamp" as though the term "luminaire" had been used instead. This is improper. *See U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) (The purpose of claim construction is not to take simple

terms and replace them with complex and potentially confusing phrases).

The term at issue in the claims is "lamp," *not* "luminaire." While a "luminaire" may indeed require the additional parts that IDC lists, a "lamp" itself does not; it is only "a light source," *without* those additional parts. IDC's proposed construction should be rejected as being essentially the wrong definition of the wrong word and, in any event, completely inconsistent with the use of "lamp" in the Code as simply "a light source."

### 4. IDC's Proposed Construction of "Lamp" Should Also Be Rejected as Imposing Extraneous Limitations Contrary to the Intrinsic and Extrinsic Evidence.

IDC contends that the term "lamp" should be construed in the context a "3-way incandescent lamp (having two (2) filaments)." IDC Opening Brief at 1. To the contrary, the "context" of 3-way incandescent lamps or bulbs is irrelevant here, since neither of the '477 patent nor the '827 patent disclose or discuss use of 3-way incandescent lamps having two filaments, or even discuss incandescent bulbs at all. Instead, light emitting diodes ("LEDs") are disclosed as the devices that generate light and neither the '477 nor '827 patents disclose that that light emitting devices need be confined in any particular type of package or any package at all.<sup>6</sup>

IDC contends that the term "lamp" should be construed to require a "bulb type enclosure, light emitting element(s) within said enclosure, and a means for mounting the package onto the lighting device." IDC Opening Brief at 9. However, of all the parts listed by IDC, only the "light emitting element(s)" (i.e., the LED "dies") actually generate light.

IDC contends that "[i]f Defendant Richmond intended for the term "LED" to require that each LED be protected within its own individual "package," the protection provided by

<sup>&</sup>lt;sup>6</sup> Unlike an incandescent light bulb where the bulb is essential for containing the vacuum necessary to permit incandescent filament to produce light without burning up instantly, a light emitting diode requires no such bulb or "package" to fully function to produce light. In instances one of more LEDs are optionally "packaged" in a bulb type enclosure, it is only for protection from mechanical damage from rough handling or the like but has nothing to do with the LEDs function as a "light source" or "device that generates light" or the colour of light produced.

enclosing the LEDs 34a, 34b, and 34c in protective diffuser 115 in the Fig. 13 embodiment would have been unnecessary." IDC Opening Brief at 11. With all due respect to IDC, that argument does not make sense. Quite the contrary, since the translucent diffuser 115 in the Fig. 13 embodiment of the '827 patent and diffuser 38 of the '477 patent already provides physical protection for the LEDs 34a, 34b, and 34c, placing each of LEDs 34a, 34b, and 34c in its own separate bulb-like "package" to provide further, though not precluded, would have been redundant.

IDC contends that "Defendants' proposed construction of "lamp" in accordance with its common and ordinary meaning of "a device that generates light" is overbroad because, according to IDC, it would encompass "cigarette lighters, rocket engines, and nuclear bombs." (IDC Opening Brief at 8). IDC's contentions are absurd, of course, since obviously none of those light generating devices (including a nuclear bomb!!!) would be suitable for a solar powered garden light.

Dr. Laurent states that "the specifications of the '477 and '827 Patents disclose singlecolor, light emitting diode packages as the sole example of 'lamps.'" Laurent at 12, Par. 22. Contrary to Dr. Laurent's contention, although the word "package" appears 56 times in IDC's brief, and many times in Dr. Laurent's declaration, the term "package" *never* appears even *once* in either of the '477 or '827 patent.

Referring to the schematic of Fig. 9 of the '477 showing three individual LEDs forming part of element 34 and given letter suffixes; i.e. 34A, 34B and 34C, Dr. Laurent admits that "such component identification labels sometimes indicates that the components are part of a single package." Laurent Declaration at 12, Par. 22. But then, Dr. Laurent inexplicably concludes, with no support, that a person skilled in the art would "logically" view this disclosure

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to mean the exact opposite -- that the schematic shows three individual, single color, LED "packages." *Id.* Dr. Laurent also ignores that fact that in the '477 patent and '827 patent, the respective red, green and blue LEDs that are depicted diagrammatically as sub-elements 34A, 34B and 34C of element 34 are *not* depicted as being disposed in any "package." The absence of the depiction of a "package" or "bulb" surrounding any of the LEDs in Fig. 9 that fact that those LED's are sub-elements of element 34 depicted as a *single* element in Fig. 3, would, contrary to Laurent's contention, lead a person skilled in the art to "logically" conclude that the packaging or lack of packaging of the LED's in a lighting device has nothing to do with the meaning of the term "lamp," whose sole function is as a "light source," to "generate light" of a particular colour. Dr. Laurent makes no attempt to justify how his conclusion can logically be contrary to his premise.

Dr. Laurent admits that "[n]either the claims nor the embodiments of the '477 and '827 Patents teaches a distinction between the use of several single-die LED packages having different colors and a single LED package containing multiple light emitters having different colors." Laurent Declaration at 13. The lack of distinction as to the type of "package" for the LED lamps (i.e., whether there can be one or multiple LED lamps in one "package" or no "package" at all) is consistent with the fact with the term "package" *does not exist* in the specification or claims of the '477 and '827 patents. Dr. Laurent contends that "[e]ach filament in a multi-filament lamp is equivalent to one of the single-color diodes in a multi-diode LED." Laurent at 15, Par. 23. That is simply not so. LED devices are not "equivalent" to incandescent bulbs because LEDs generate light according to entirely different physical principles than incandescent filaments. As Dr. Laurent admits, "[t]he light produced by a specific LED is characterized by its characteristic color spectrum depending upon the specific semiconductor

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materials used in creating that LED (specifically, the "band gap" of the semiconductor material). Laurent at 6, Par. 12. That colour is the same whether the LEDs are each placed in the same "package", a different "package" or no "package". By contrast, incandescent filaments produce while by heating of the filament to a high temperature, and inherently only produce white light. Incandescent filaments burn up instantly without a vacuum-containing "package." LEDs do not.

Dr. Laurent contends that, during the prosecution of the '477 Patent, the Applicant "appears" to "defer" to prior art sources, such as the Shalvi patent, for the definition of the term "lamp." Laurent at 15, Par. 23. Applicant did no such thing. To the contrary, the Applicant expressly stated that Shalvi did *not* disclose "lamps of different colours." *See* Amendment and Response to Office Action mailed September 7, 2005, Shiells Decl. Exhibit 3.

Dr. Laurent contends that "Shalvi teaches solely the use of component packages, referring solely to 'incandescent lamps 22 and a halogen lamp 23." Laurent 15, Par. 23. But Shalvi also discloses that "light emitting diode lamps" can be used, and (as distinguished from the incandescent bulbs 22 and 23 that IDC refers to in Fig. 3) he *never* depicts one of those "light emitting diode lamps" as being in an individual bulb enclosure or other "package." *See* Shalvi, U.S. Patent No. 6,120,165 at col. 1, lines 15-53, Shiells Dec.. Exhibit 7. Accordingly, Shalvi's use of the term "light emitting diode lamps" is fully consistent with the proper definition of "lamp" proposed by Defendants as a "device that generates light."

More to the point, however, is United States Patent No. 7,064,498 ("Dowling"), Shiells Decl. Exhibit 5, cited and relied upon by the Examiner during prosecution, which directly refutes Dr. Laurent's argument for adding a "package" limitation to a claim that has none.<sup>7</sup> Dowling

<sup>&</sup>lt;sup>7</sup> Dowling was thoroughly considered during prosecution. *See*, Ex. 1, '477 Patent, page 1 (listing Dowling), and '477 prosecution history, Information Disclosure Statement (initialed by Examiner). Ex. 3, '477 File History at 40. Indeed, the Assistant Examiner of the '477 patent, Minh Dieu A., was same Assistant Examiner responsible for

states that "the term 'LED' means any system that is capable of receiving an electrical signal and producing a color of light . . .," that "an 'LED' may refer to a single light emitting diode package having multiple semiconductor dies that are individually controlled . . ." *but also* "includes packaged LEDs, *non-packaged* LEDs, surface mount LEDs, chip on board LEDs and LEDs of all other configuration." Dowling, col. 5, lines 45-60, Shiells Decl. Exhibit 5. (emphasis added). Since an LED is the preferred – and only – example of the "lamp" recited in the '477 and '827 patents, Dowling's express statement that an LED may be "packaged" or "non-packaged" should be deemed dispositive of whether an extraneous "package" limitation should be engrafted onto the term "lamp." It should not.<sup>8</sup>

In another attempt to create a "package" limitation where none exists, Dr. Laurent has enlarged an early, roughly-drawn version of Fig. 3, and suggests that it "appears" that it shows multiple LED "packages." Fig. 3 shows no such thing. To the contrary, like the version of Fig. 3 appearing in the '477 and '827 patents as issued, the early version of Fig. 3 shows a single element 34, which encompasses the multiple LEDs 34A, 34B and 34C, without regard to their "packaging," if any. Furthermore, if the three LED light sources of different colors (i.e., red, green and blue) of Laurent Exhibit B were mounted on the same planar substrate and used without any cover or "package" the LED "chips" might also appear as blips or blobs. Dr. Laurent's attempt to turn ink blobs into non-existent "packages" is of no more use for interpreting patent claims than a Rorschach test or tea leaves.

Dr. Laurent touts the use of separate LED bulbs in Defendants' globe light to construe "lamp," because of what he calls "clear indications that this product [Defendants' globe light] is

prosecution of Dowling, and he simultaneously examined both applications. See Ex. 1, '477 patent, page 1; Ex. 5, Dowling, page 1.

<sup>&</sup>lt;sup>8</sup> Dowling also stated that, although "an LED system is one type of illumination source," the term "illumination source" encompasses, in addition to LED systems, "all illumination sources." *See* Dowling, col. 5, line 64 to col. 6, line 6, Shiells Decl. Exhibit 5.

protected under the '477 patent."<sup>9</sup> Defendants agree that their globe light is protected under the '477 patent. However, it is clearly improper for IDC and Dr. Laurent to attempt to use Defendants' commercial embodiment to construe the claims. *Glaxo Group Ltd. v. TorPharm, Inc.*, 153 F.3d 1366, 1373 (Fed.Cir.1998) (citing *Zenith Labs., Inc. v. Bristol-Myers Squibb Co.*, 19 F.3d 1418 (Fed.Cir.1994)).

IDC cites to *Phillips v. AWH Corp.*, 415 F. 3d 1303, 1327 (Fed. Cir. 2005) for the proposition that if a district court has applied all available tools of claims construction and still finds a term ambiguous, it may construe the terms so as to preserve the validity of the claim. That law is not disputed and may be applicable in other contexts to preserve the validity of the claims. However, in this context, the term "lamp" is not ambiguous at all; it simply means "a device that generates light" or a "light source," in accordance with its ordinary meaning and/or as defined in the Code, without limitation as to the presence or absence of any type of "packaging."

Contrary to IDC's suggestion, its Model No. 6890, which it asserts (but has not even proven) is prior art, does not anticipate any of the claims of the '477 or '827 patent and has nothing to do with the proper construction of the term "lamp." The Model No. 6890, like the IDC "Four Seasons" light already discussed in Defendants Opening Brief, is only capable of successively alternating the LED's "on" or "off," one at a time, like a traffic light. *See*, literature for Four Seasons light, attached as Exhibit 8 at IDC001782. ("Choose the desired color setting by positioning the switch located on the underside of the top section. Choose MULTI if *alternating* colors are desired. Or, choose a single color, GR for green, RD for red or AM for

<sup>&</sup>lt;sup>9</sup> It is also irrelevant whether or not the Fig. 13 of the '827 patent appears to show bulbs surrounding the LEDs 34: Defendants do not contend that enclosing one or more of the LED light sources or "lamps" in a bulb-like "package" for additional protection is *precluded*, only that such "packages" for the LED light sources are not *required* and that whether multiple, independently controlled LED light sources (i.e., "lamps") are separated, together, in the same "package," separate "packages" or no "packages" at all is *irrelevant*, since there is *no "package" limitation in any of the claims*.

amber.") (Emphasis added). Such successively alternating "on/off" lights do not provide the "cross fading" colours characteristic of the "varying colour[s]" of the '477 and '827 patents, which, by contrast, provide a "constantly changing lighting effect that cycles through the light spectrum by ramping up and ramping down the intensity of the light displayed by the LEDs 34A, 34B, and 34C." Ex. 1, '477 patent, col. 6, lines 3-9. (Emphasis added). Also, the Four Seasons light (and the Model 6890 light), with only the colours red, green and amber, cannot "cycle through the spectrum" since the colour blue needed to produce the other significant colours of the spectrum is not provided. *Compare*, Ex. 1,'477 patent, col. 5, lines 48-49 ("In this example, the first LED 34A is blue, the second LED 34B is green and the third LED 34C is red."). Accordingly, neither the Model No. 6890 nor the "Four Seasons" light have any impact on the proper construction of the term "lamp."

For the foregoing reasons, Defendants' construction of "lamp" as being "a device that generates light" or the Code's definition of "lamp" as "a light source" should be adopted and IDC's attempt to impose a non-existent "package" limitation should be rejected.<sup>10</sup>

### C. "The Switch Being Exposed to Provide for Access Thereto" - '477 Patent: Claims 1 and 20.

# 1. The Code Defines "Exposed "as "On or Attached to the Surface or Behind Panels Designed to Allow Access."

The Code defines "exposed" as "[o]n or attached to the surface *or behind panels designed to allow access.*" Code, Shiells Supp. Exhibit 17. Emphasis added). IDC's and Dr. Laurent's proposed definitions would simply lop off the second part of the Code's definition of "exposed" (*"or behind panels designed to allow access"*) as though it was not there. But it is there.

<sup>&</sup>lt;sup>10</sup> If the extraneous and non-existent term "package" in IDC's proposed construction is omitted, IDC's proposed construction would be essentially consistent with Defendants' proposed construction of "lamp" in accordance with its ordinary meaning of "a device that generates light" and with the Code's definition of "lamp" as "a light source.

# 2. Defendants' Proposed Construction of "Exposed" is Consistent with the Code's Definition of "Exposed."

Defendant's currently proposed construction of "exposed" is "made visible to the user or deprived of shelter or protection to make it available to the user for use, without the need for tools or destruction." This proposed construction is consistent with the Code's definition of "exposed," since a location "on or attached to the surface or behind panels designed to allow access" would presumably not require "tools or destruction" to permit such intended access.<sup>11</sup>

As pertinent here, the '477 patent discloses two sets of switches, each meeting one of the two alternative forms of "exposed" as defined in the Code. Switches 40 and 65 meet the first part ("one or attached to the surface") since these switches are shown and described as being "mounted on the base 26 so as to be a downwardly facing external surface of the base 26." ('477 patent, col. 6, lines 62-66, Ex. 1).<sup>12</sup>

The other set of switches disclosed in the '477 patent, switches 69, 70 and 71, which also "control delivery of electric power from the battery to operate [the] circuit," as recited in the claims, meet the second part of the definition of "exposed" ("behind panels designed to allow access"). These switches are expressly described in one embodiment of the '477 patent as being "accessible" to a user for operation. *See* '477 patent, col. 5, lines 22-23; 28-29 and 31-32, Ex. 1

<sup>&</sup>lt;sup>11</sup> For comparison, it is noted that the Code includes definitions for terms other than "exposed," that define different levels of ease of access; "accessible" and "readily accessible." The Code defines these terms as:

<sup>&</sup>lt;u>Accessible</u> (as applied to wiring methods): Capable of being removed or exposed without damaging the building structure or finish or not permanently closed in by the structure or finish of the building.

<sup>&</sup>lt;u>Accessible, Readily (Readily accessible)</u>: Capable of being reached quickly for operation, renewal, or inspections without requiring those to whom ready access is requisite to climb over or remove obstacles or to resort to portable ladders, and so forth.

<sup>&</sup>lt;sup>12</sup> Also, since there is no obstruction to switches 40 and 65 (even an obstruction designed to permit access to the switches), switches 40 and 65 also meets the Code's definition of "readily accessible" ("[c]apable of being reached without requiring remov[al of] of obstacles . . ."). Code, def. of "readily accessible," Shiells Supp. Decl. Exhibit 18. Indeed, switches 40 and 65 are described as "readily accessible" in the '477 specification. See '477 patent, col. 6, lines 62-66, Ex. 1 ("This enables a user to control the device via readily accessible switches . . ."). However, the term "readily accessible" is not used in any of the claims of the '477 or '827 patents.

("Each of the switches 69, 70 and 71 is then connected to the negative terminal of the battery 33 . . . [and] determine the intensity of light emitted by each of LEDs 34A, 34B. . . . The switches 69, 70 and 71 can be made *accessible to a user* to create custom lighting effects.") (emphasis added). Though switches 69, 70 or 71 are clearly described as being "accessible" in one embodiment, none are shown or described as being on any external surface of the solar lighting device. Thus, switches 69, 70 and 71 would inherently need to be behind a panel or other obstruction. However, since switches 69, 70 and 71 are clearly *designed* to be "accessible" in this embodiment (and are so described) they inherently would meet the second part of the Code's definition of "exposed," "behind panels *designed to allow access.*"

### 3. IDC's Proposed Definition of "Exposed" Is Inconsistent with the Code's Definition of "Exposed."

IDC proposes that the term "exposed" should be construed to mean "immediately accessible to a user without the need to disassemble any component of the lighting device." IDC's proferred expert, Dr. Laurent, proposes an alternative construction, "having no intervening obstruction between itself and the user to provide for access thereto." (IDC Opening Brief at 21-22). Neither of IDC's proposed definitions is consistent with the Code.

IDC's proposed construction of "exposed" as "immediately accessible to a user without the need to disassemble any component of the lighting device" and Dr. Laurent's proposed construction of "exposed" to mean "having no intervening obstruction between itself and the user to provide for access thereto" are essentially the Code's definition of "readily accessible," rather than the definition of "exposed." Thus, either of IDC proposals would incorrectly define the term "exposed" used in the claims of the '477 patent as though the term "readily accessible" had been used in the claim instead. This distinction between "exposed," "readily accessible" is important, since the Code's definition of "readily accessible" precludes the need to remove "obstacles" (whether or not easily removable) but the Code's definition of "exposed" *expressly permits* a location "behind panels designed to permit access." The term "accessible" in the Code essentially only prohibits the need to "damage" the structure.

In using the term "exposed" in the claims of the '477 patent, the inventor was clearly also aware of the terms "accessible" and "readily accessible," since both terms are they are used in the specification of the '477 patent, for different sets of switches ("accessible" for the non-external switches 69, 70 and 71 and "readily accessible" for external switches 40 and 65).<sup>13</sup>

Defendants' originally proposed definition of "exposed" of "made visible to the user or deprived of shelter or protection to make it available to the user for use, without the need for tools or destruction" is consistent with the Code's definition of "exposed" (since a location "on or attached to the surface or behind panels designed to allow access" would presumably not require "tools or destruction" to permit such intended access). However, for the Court's consideration, Defendants propose the following modified definition of "exposed" that is even more consistent with the Code's definition of "exposed" discussed herein:

The switch being on or attached to an external surface of the solar lighting device or behind a panel or other obstruction designed to allow access.

The foregoing modified construction is closely analogous to the Code's definition of "exposed," as discussed above, and encompasses both the "readily accessible" (and external) location for switches 40 and 65 and the "accessible" (but not external) embodiment f switches 69, 70 and 71.

<sup>&</sup>lt;sup>13</sup> Switches 69, 70 and 71 of the Fig. 9 schematic (expressly described as being "accessible" in one embodiment, but not on an external surface) would also be encompassed by the other definition for "exposed" in the Code, [c]apable of being inadvertently touched or approached nearer than a safe distance by a person [which] is applied to parts that are not suitably guarded, isolated, or insulated," though it is not the most relevant definition: Switches 69, 70 and 71 are *intended* to be "accessible to a user" in this embodiment and there is no disclosure of a "suitable guard" to prevent access, and such a guard would be inconsistent with the intent to make the switch "accessible to a user."

# 4. IDC's Proposed Definition of "Exposed" Is Inconsistent the Intrinsic Evidence.

IDC has failed to acknowledge that switches 69, 70 and 71 of the Fig. 9 schematic are expressly described as being "accessible" to the user in one embodiment, but are clearly not on an external surface. Since the switches 69, 70 and 71 are expressly designed to be able to be accessed by a user for operation, but are not external, they must inherently be "behind panels [or other parts] designed to allow access." Accordingly, they meet the Code definition of "exposed."

IDC has simply ignored the "accessible" embodiment of switches 69, 70 and 71. Its proposed construction would exclude this embodiment. This is presumptively improper. *Vitronics Corp. v. Conceptronics, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996) ("[W]e should not normally interpret a claim term to exclude a preferred embodiment.")

IDC's attempt to rely to the Applicant's statement in an amendment of January 30, 2006 distinguishing Shalvi as having a "switch that is 'normally hidden or not *immediately* accessible' to a user" is misplaced. Shalvi teaches that "[a] *power switch 31 . . . is normally hidden or not immediately accessible* from outside the housing 13 *to prevent switching ON and OFF by an unauthorized person.*" Ex. 7, Shalvi, column 2, lines 31-3. (Emphasis added). Shalvi makes clear that the location for the switch must be such that "any intruder is *unable* to dis-arm or turn off the solar lamp by operating the switch 31 or some other manual switch on the solar lamp." Ex. 7, Shalvi, col. 3, lines 1-10. (Emphasis added). To render an intruder *unable* to turn off the solar lamp, the switch must be essentially inaccessible. As distinguished from Shalvi's inaccessible switches designed to *prohibit* access and operation of the switches, switches 40 and 65 are *designed* to be *readily accessible* by being external and, in one embodiment, switches 69, 70 and 71 are *designed* to be "accessible," though not on an external surface. Accordingly,

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Applicant's argument distinguishing Shalvi in no sense requires limiting the meaning of "exposed" to be "immediately accessible to a user without the need to disassemble any component of the lighting device" or as "having no intervening obstruction between itself and the user to provide for access thereto," particularly since such a proposed construction would be both inconsistent with the Code's definition of "exposed" and it would exclude a preferred embodiment, the "accessible" (but not external) switches 69, 70 and 71.

For the foregoing reasons, it is respectfully submitted that this Court should adopt either Defendants' original or modified construction of "exposed" and reject both of IDC's proposed definitions.

#### D. "Switch Being Accessible by a User" - '827 Patent: Claims 27 and 35.

### 1. The Code Defines "Accessible" as "[C]apable of Being Removed or Exposed Without Damaging the Building Structure or Finish or not Permanently Closed in by the Structure or Finish of the Building."

As discussed above, the Code defines "accessible" as "[c]apable of being removed or exposed without damaging the building structure or finish or not permanently closed in by the structure or finish of the building." Defendants' proposed construction of "accessible" is consistent with this definition as well as being consistent with how the term "accessible" is used in the patents. IDC's proposed construction is neither.

### 2. Defendants' Proposed Construction of "Accessible" is Consistent with the Code's Definition of "Accessible."

Defendants' proposed construction of "accessible" is consistent with the Code's definition of "accessible" as "[c]apable of being removed or exposed without damag[e] . . . or not permanently closed in." In the context of the solar lighting devices at issue, a switch that is "available to the user for use, without the need for tools or destruction" is inherently "[c]apable of being removed or exposed without damaging the [enclosure's] structure or finish" and is "not

permanently closed in by the structure or finish of the [enclosure]."

As discussed above, the terms "accessible" and "readily accessible" are used in the specifications of the '477 and'827 patents to describe, respectively, different sets of switches, in a manner consistent with the respective definitions of "accessible" and "readily accessible" provided by the Code. The additional subject matter disclosed in the '827 patent, Figs. 11-13 and the written description describing this additional embodiment, also describes switches are as "accessible" that are not on any external surface. In particular, a user can also "access" switches 40 and 65 of the Fig. 11-13 embodiment of the '827 patent by removal of easily removable part or parts designed to allow access, that is, removing base 106 from lens 101 merely by relative movement of flanges 116 and 117. '827 patent., col. 8, line. 66 to col. 9, line 4, Ex. 2. <sup>14</sup> Dr. Laurent admits that "accessible" means "able to be accessed" and that these parts are "easily removable" to permit access. Laurent at 27, Par. 41. Accordingly, Defendants' proposed construction of "accessible" is consistent with the definitions in the Code, as well as being consistent with the disclosures of the '477 and '827 patents.

# 3. IDC's Proposed Definition of "Accessible" Is Inconsistent with the Code's Definition of "Accessible" and How the Term "Accessible" Is Used in the Specifications of the '477 and '827 Patents.

IDC's proposed definition for "accessible" is "immediately accessible to a user without the need to disassemble any component of the lighting device" and Dr. Laurent's proposed construction of "having no intervening obstruction between itself and the user to provide for access thereto" are identical to IDC's proposed definitions for "exposed." It is respectfully

<sup>&</sup>lt;sup>14</sup> Switches 69, 70 and 71 of the Fig. 9 schematic (expressly described as being "accessible" in one embodiment, but not on an external surface) and switches 40 and 65 of the Fig. 11-13 embodiment of the '827 patent (in an enclosure having a cover designed to be easily removable to allow access) would also be encompassed by the other definition in the Code for "accessible," "admitting close approach; not guarded by locked doors, elevation of other effective means." A switch designed to be "accessible to a user" must inherently not be behind a locked obstruction, since such would prohibit access.

submitted that IDC's proposal to define "accessible" *identically* to "exposed " simply makes no sense at all, since the terms "exposed," "accessible" and "readily accessible" each have different meanings, are separately defined as such in the Code, because the terms "accessible" and "readily accessible" are each used differently in the patents at issue to describe different sets of switches. IDC's proposal to define "accessible" as *precluding* any "intervening obstruction" is in conflict with the Code's definition of "accessible" as "[c]apable of being removed or exposed without damaging the [enclosure]," which definition *presupposes* the existence of an "intervening obstruction" that may need to be removed to expose the part, providing such is accomplished "without damag[e]." IDC's own expert, Dr. Laurent admits that "[a] person skilled in the art of designing solar powered lighting systems would generally understand the use of the adjective "accessible" to mean "able to be accessed."

Dr. Laurent's and IDC's proposed construction of "accessible" would exclude from the claims of the '827 patent the Figs. 11-13 embodiment of the '827 patent described as having "accessible" (but not external) switches, switches that Dr. Laurent acknowledges can be accessed by the "easy removal" of a part. This is the only embodiment added to the '827 patent. Construing a claim tem to exclude a preferred embodiment is presumptively unreasonable. *See Vitronics Corp.*, 90 F.3d at 1583 ("[W]e should not normally interpret a claim term to exclude a preferred embodiment.").

Defendants submit that their original proposed construction of "accessible" as "available to the user for use, without the need for tools or destruction" is appropriate. However, for the Court's consideration, Defendants herewith propose the following modified construction as an alternative, which is even more closely analogous to the Code's definition of "accessible."

Capable of being removed or exposed without damage and not permanently closed in by the structure or finish of the solar lighting device.

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For the foregoing reasons, either Defendants' original proposed construction of

"accessible," or their modified construction, should be adopted by this Court.<sup>15</sup>

#### E. "To Produce a Desired Colour" - '477 Patent: Claims 1 and 20.

Defendants proposed construction is simply that the "desired colour" means "a colour that is desired by the user or intended by the designer." This construction is well-supported by the specification. *See* Ex. 1, '477 patent, col. 6, lines 24-27 ("In the embodiment shown in FIG. 9, the battery 33 powers the light circuit 60 during the night to produce light of varying colours and the user can optionally select a desired colour by pushing the push button 65.")

IDC, however, proposes to add a host of limitations to the simple phrase, "to produce a desired colour" as follows:

The at least two lamps of different colors illuminate simultaneously, resulting in the mixing of different colors such that in combination, they produce a desired color.

Ex. 15, Joint Statement Under L.Pat.R. 4.3, Ex. A at 5-6.

IDC's proposal should not be adopted. Although the condition of different colors illuminating substantially simultaneously as different LED's ramp up and down, to result in perceived mixing of colors, is not precluded by the language of the claims, there is nothing in the intrinsic or extrinsic evidence that mandates that a "desired colour" must *only* be produced by mixing colours. Furthermore, the '477 and '827 patents disclose some embodiments where "the switches 69, 70, 71 [that] correspond to the LEDs 34A, 34B, and 34C [can be used] to enable or disable a particular colour range." Ex. 1, '477 patent, col. 5, lines 22-25, Ex. 1. IDC's proposed construction would also produce the unreasonable result of precluding operation of two of

<sup>&</sup>lt;sup>15</sup> For the Court's convenience, a table prepared by counsel for Defendants summarizing and comparing key distinguishing features of the definitions for "accessible," "readily accessible," "exposed," and "lamp," and how those terms are applied in '477 and '827 patents and prior art of record during prosecution, is attached hereto as an Appendix.

switches 69, 70 and 71 simultaneously to disable two of LEDs 34A, 34B, and 34C (leaving only

one LED of one colour in operation), though the remaining LED is clearly (at least temporarily)

a colour "desired" by the user.

IDC further contends that only the "designer" has control over the colour, stating as

follows:

as noted by Dr Laurent, the specification does not teach that a user would have ultimate control over the desired colour produced in combination but rather, it would be under the control of the circuit designer (Laurent Decl.  $\P28$ .) Thus IDC has modified its proposed construction so as to refer only to the intent of the *designer* (not the user) of any potentially infringing device.

IDC Opening Brief at 15 (emphasis in original.)

IDC's proposed interpretation is contrary to the disclosure of the '477 patent. According

to '477 patent:

In a further embodiment, the switches 69, 70, 71 determine the intensity of light emitted by each of the LEDs 34A, 34B, and 34C. Various combinations of the frequency and intensity of light are also possible. The switches 69, 70, 71 can be made accessible *to a user* to create custom lighting effects. Alternatively, the switches 69, 70, 71 are set according to a predetermined configuration and are not readily accessible by a user. (Emphasis added)

See '477 patent, col 5, lines 18-35, Ex. 1 (emphasis added).

Furthermore, col. 6, lines 24-27 of the '477 patent states: "In the embodiment shown in

FIG. 9, the battery 33 powers the light circuit 60 during the night to produce light of varying

colours and the user can optionally select a desired colour by pushing the push button 65."

In view of the foregoing disclosures in the '477 patent, Defendants' proposed construction of this phrase as "a colour that is desired by the user or intended by the designer" is appropriate and should be adopted.

### F. "Including a Varying Colour."

IDC contends that "the term "varying colour" should be understood in the context of "the

description in the '477 patent that "the light devices 10 displays a constantly changing lighting effect that cycles through the light spectrum by ramping up and ramping down the intensity of light displayed by the LED's 34a, 34b, and 34c." IDC Opening Brief at 17. Defendants agree with IDC's statement to that extent. Furthermore, where LEDs 34a, 34b, and 34c are the colors red, green and blue, respectively, mixing of the red, green and blue light to form intermediate colours of the spectrum (such as yellow, cyan, magenta) is an appropriate means by which the "changing lighting effect that cycles through the light spectrum" can be produced, and that this is encompassed by the teachings of the '477 patent.<sup>16</sup> *See* Ex. 1, '477 patent, col. 6, lines 1-9.

As Defendants demonstrated in their opening brief, the phrase "to produce a varying color," read in the context of producing "a constantly changing lighting effect that cycles through the light spectrum by ramping up and ramping down the intensity of light displayed by the LED's 34a, 34b, and 34c," means a gradual change from one colour as the respective intensities emitted by the lamps are "ramped up" and "ramped down" over time, at taught in the specification. Ex. 2, '827 patent, col. 7 at lines 7-18. This is quite different from simply alternating a few LEDs "on" and "off" successively (as in IDC's "Four Seasons" and Model 6890 lights).

Laurent contends that he finds no support for a definition of the terms "gradual" or "gradually." (Laurent at 22 Par. 31) However, Laurent specifically quotes the disclosure of the

<sup>&</sup>lt;sup>16</sup> Although mixing of the colors red, green and blue to form the other colours of the spectrum is one way to produce the colours of the spectrum, and is taught by the '477 patent, this is not the only means by which "a changing lighting effect that cycles through the light spectrum" can be produced. Additional LEDs designed to inherently produce each of the colors yellow, cyan and magenta, for example, could be provided in addition to red, green and blue LEDs. Although three additional LEDs would be required to produce the light spectrum as the intensity of the LEDs ramp up and down, mixing of colours would not necessarily be required. It is acknowledged that the '477 patent does not specifically teach having additional LEDs of those intermediate colors, rather than providing the colours of the spectrum by mixing red, blue and green light as the intensities of the respective LEDs are ramped up and down to produce the characteristic "fading" of the colours from one to the next. However, producing additional colours of the spectrum by providing additional LEDs of colours in addition to red, green and blue LEDs is not prohibited by the claim language.

'477 Patent that describes how the colour of the light is varied, i.e., that "the light device 10 displays a constantly changing light effect the cycles through the light spectrum by ramping up and ramping down the intensity of light displayed by the LED's 34A, 34B, and 34C." '477 patent, col. 6, lines 1-9 (emphasis added). In fact, in the Texas Case, IDC itself originally construed the "varying colour" to contemplate "ramping up and ramping down of the respectively intensities of the light." *See* IDC's Preliminary Proposed Construction of claim Terms, Phrases and Clauses, served January 26, 2009, at 1-2. The "ramping up" and "ramping down" over time *is, in fact*, a teaching of "gradual" change in the intensity of the light. This is distinct from turning the light successively "on" and "off" or "flashing" them) in accordance with Defendants' proposed (and correct) meaning for "varying colour."

For the foregoing reasons, Defendants' construction of the words in this claim phrase is consistent with teaching in the patent of how the "varying color" by "ramping up" and "ramping down" the intensities of the light emitted by the lamps and should be adopted.

### G. "Independently Control Delivery of Power to Each of Said Lamps so as to Vary Intensity of Light Emitted Over Time to Produce a Continuous Color Changing Cycle."

The first part of this claim phrase, "independently control delivery of power to each of said lamps" is unambiguous and requires no construction; all the words are used in accordance with their ordinary meanings (which Defendants provided). As to the remainder of the phrase, IDC appears to admit that the phrase "vary intensity of light emitted over time to produce a continuous color changing cycle" means substantially the same thing as "to produce a desired colour including a varying colour." IDC Opening Brief at 16. Accordingly, it is believed that no further response is required regarding this phrase.

### H. "Solar Cell Mounted on a Surface so as to be Exposed to Light" All Independent Claims Asserted

Claims 1 and 20 of the '477 patent recite that a solar cell is mounted on "a surface of an assembly so as to be exposed to light."<sup>17</sup> Defendants' proposed construction is consistent with the common and ordinary meaning of "expose:" "to subject or allow to be subjected to an action, influence, or condition." Ex. 15, Joint Statement Under L.Pat. 4.3, Ex. A at 7-8. Thus, "exposed to light" simply means: "subjected to, or allowed to be subjected to the influence of light." *Id.* 

IDC, by contrast, contends that this simple phrase is indefinite. *Id.* Thus, IDC does not propose a meaning for this phrase.<sup>18</sup>

IDC, seeking to create an ambiguity where there is none, misleadingly asks the rhetorical question, to which it suggests there is no answer: "Is the solar cell mounted so as to be exposed to the light from lamps or sunlight? (IDC Opening Brief at 18.) But the answer, provided by the '417 patent, is simple: "[T]he solar cell would be mounted so as to be exposed to *sunlight*." Ex. 1, '477, col. 7, lines 7-8 (emphasis added). Sunlight is what allows the solar cell to produce electricity. Construing a "solar cell" (n.b., "solar" means "from the sun") to required that it receive and create electricity light from a lamp that is *powered* by electricity produced by the solar cell itself is nonsensical and assumes that Applicant may have intended to claim a perpetual motion machine. A perpetual motion machine was obviously not intended. Although placing the solar cell so that it may incidentally be struck by light from the lamp is not precluded, and Figs. 11-13 of the '827 patent shows such a construction, light from the lamp is obviously not the

<sup>&</sup>lt;sup>17</sup> The language that appears in the printed '477 patent had an error, and was corrected by Certificate of Correction, dated July 22, 2008.

<sup>&</sup>lt;sup>18</sup> In IDC's Motion for Leave to Amend its Complaint at 6, (Doc. 47) IDC contended that the surface upon which the solar cell is mounted must be an "exposed" surface in the sense of being an external surface, excluding positioning under a transparent cover. Accordingly, this potential construction by IDC will also be addressed.

"light" referred to in the claim to which the solar cell must be exposed; it is "sunlight."

For the foregoing reasons, the claim language is not indefinite and Defendants' proposed construction should be adopted.

### I. "A Solar Cell Mounted on a Surface of an Assembly" - '477 Patent Claim 20.

Plaintiffs contend that the term "an assembly" is indefinite. It is not. The solar cell can be mounted on *any* surface of "an assembly" of any (at least two) the defined elements so that the solar cell is electrically operable in conjunction with the recited elements, such as the "rechargeable battery to power the circuit." providing, of course, that the "surface" of that "assembly" is "exposed to light" (i.e., sunlight) during operation of the solar cell (directly or though transparent or translucent material) so as to charge the rechargeable battery and, thus, ultimately power the lamps. Therefore, the claim language is broad in basically only limiting the location of the solar cell to a "surface" that is "exposed to light [from the sun}, but there is no indefiniteness.

It is respectfully submitted that Defendants' proposed construction should be adopted.

### J. "Operatively Associated"- All Independent Claims Asserted.

Defendants propose that in the context of the '477 and '827 patent, "operatively associated" simply denotes an operating functional connection link between two elements of the claim language, each of which should be defined in accordance with its dictionary definition.<sup>19</sup> This meaning is consistent with how the term "operative" is used in the '477 patent: "The switches 40 and 65 are each operable to control delivery of electric power from the batteries to the LEDs 34A, 34B and 34C. The circuit 29 is only rendered *operative* when there is

<sup>&</sup>lt;sup>19</sup> "Operative" means "[b]eing in effect; having force; operating" and "associate" means "[t]o connect together; combine." Ex. 15, Joint Statement Under L.Pat.R. 4.3, Ex. A at 11-12; Ex. 10, Defendants' L.Pat.R. 4.2 definitions at 44-46.

insufficient light, that is, by operation of a light sensitive switch, i.e. the diode 43 (sic. 42)" *See* Ex. 1, '477 patent, col. 6, line 42 to col. 7, line 3. (Emphasis added.)

IDC, for its part, originally provided no proposed construction for "operatively associated," contending it was sufficiently clear that it required no construction. Now, IDC has flip-flopped, suggesting that "operatively associated" may be vague, citing one old, district court case decided prior to the creation of the Federal Circuit, where, under its unique facts, vagueness was found for the term "operatively associated." See Laitram Corp. v. Deepsouth Packing Co., 301 F. Supp. 1037, 1064 (E.D. La 1969). However, fast forward fifty years: The Federal Circuit had been created and it holds that "the claim term 'operatively connected' is a general descriptive term frequently used in patent drafting to reflect a functional relationship between claimed components [that] means the claimed components must be connected in a way to perform a designated function."). Innova/Pure Water Inc. v. Safari Water Filtration System, Inc., 381 F.3d 1111, 1117-20 (Fed. Cir. 2004). The Manual of Patent Examination Procedure ("M.P.E.P"), ¶2173.05 (g) of the United States Patent and Trademark Office (the bible for patent examiners and practitioners alike) also disagrees with IDC, approving "operatively connected" as "a general descriptive claim term frequently used in patent drafting to reflect a functional relationship between claimed components." Consistent with this approval of the definiteness of the language "operatively associated," the Patent Office has, since 1976, granted over twenty three thousand (23,564 to be exact) patents having the term "operatively associated" in the claims. See Shiells Supp. Decl. Exhibit 22, which are the results of a search on the official "uspto.gov" website for the term "operatively associated" in patents granted since 1976. In view of this, it is respectfully submitted that the term "operatively associated" is not indefinite, and should be construed as Defendants have proposed.

#### K. "Securing Means."

Defendants' proposed construction was not challenged by IDC, and should stand.

#### L. "Activation Sub-circuit."-827 Patent: Claim 32.

Defendants propose to construe "activation sub-circuit" in accordance with the plain and ordinary meaning of the terms.<sup>20</sup> Defendants respectfully submit that this plain and ordinary meaning is consistent with the specification of the '827 patent, describing, for example, the "light operated circuit" of the '827 patent, Ex. 2, at col. 5, lines 7-12 and 30-44 and col. 7 lines 57-65, and should be adopted.

#### M. "Diode"... "That Emits Light" - '827 Patent Claim 30.

Defendants propose to construe "diode ... that emits light" in accordance with the plain and ordinary meaning of the terms.<sup>21</sup> IDC, however, once again improperly seeks to engraft the extraneous "package" limitation to meaning of "diode." For the reasons stated previously in this Reply, adding an extraneous "package" limitation is unwarranted and improper. For the reasons previously expressed, it is respectfully submitted. Defendants' proposed construction should be adopted.

## **III. TESTIMONY BY IDC'S EXPERT, DR. LAURENT, IF OFFERED, SHOULD NOT BE PERMITTED.**

For the reasons stated in Defendants' Opening Brief, if IDC offers any opinions of Dr. Laurent on claim interpretation, Defendants will object to such testimony under Fed. R. Evid. 702 and *Daubert v. Merrill Dow Pharms.*, 509 U.S. 579 (1983). Dr. Laurent has no experience

<sup>&</sup>lt;sup>20</sup> Those definitions are: "Activate:" "to set in motion; make active or more active;" "sub:" "forming a subdivision or subordinate part of a whole;" and "circuit:" "A configuration of electrically or electromagnetically connected components or devices." Ex. 15, Joint Statement Under L.Pat.R. 4.3, Ex. B, 13-15; Ex. 10, Defendants' L.Pat.R. 4.2 definitions, at 5, 8 and 67-68.

<sup>&</sup>lt;sup>21</sup> The ordinary definition of "diode" is: "an electronic device that restricts current flow chiefly to one direction." Ex. 15, Joint Statement Under L.Pat.R. 4.3, Ex. B at 21-22; Ex. 10, Defendants' L.Pat.R. 4.2 definitions, at 15.

in the relevant art of solar powered garden lights and thus is unqualified to testify regarding how a person skilled in the art would construe the claims. However, in the event this Court receives the declaration and/or testimony of Dr. Laurent, Defendants respectfully request the opportunity to submit testimony of the inventor, Simon Richmond, who is skilled in the art, in rebuttal.

#### IV. CONCLUSION.

For the foregoing reasons, it is respectfully submitted that Defendants' constructions of the disputed claim terms should be adopted.

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### **CERTIFICATE OF SERVICE**

I hereby certify that all counsel of record who have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3) on this 24th day of September, 2010. Any other counsel of record will be served by first class mail on this same date.

> /s/ Donald J. Cox, Jr. Donald J. Cox, Jr.