United States District Court,
C.D. California.

**OROAMERICA, INC,**
Plaintiff.
v.
**D & W JEWELRY CO., INC., et al,**
Defendants.

No. CV 00-12280 AHM (RZx)

**Nov. 5, 2001.**

Daniel M. Cislo, Cislo and Thomas LLP, Santa Monica, CA, Jai H. Rho, Keats McFarland and Wilson LLP, Beverly Hills, CA, Lawrence J. McClure, Michael L. Crapenhoft, William H. Wright, III, Hogan & Hartson, Los Angeles, CA, Marc J. Kesten, Marc J. Kesten Law Offices, Parkland, FL, Robert J. Lauson, Lauson and Schewe, Manhattan Beach, CA, for Plaintiff.

Aaron B. Karas, Samson Helfgott, Rosenman & Colin, Michael F. Sarney, Katten Muchin Rosenman LLP, New York, NY, Nicholas H. Browning, III, Beck & Browning, Torrance, CA, for Defendants.

**MARKMAN ORDER CONSTRUING DISPUTED CLAIM TERMS IN** '225 PATENT

A. HOWARD MATZ**, District Judge.**

## INTRODUCTION

This matter comes before the Court for patent claim construction. The parties filed a 211 page Joint Statement of Disputed Claim Terms in Support of Markman Hearing in which they disputed the meaning of many, if not most, of the terms in eight different patents related to hollow diamond cut rope chains and methods for their manufacture. FN1 At the August 7, 2001 *Markman* hearing, the Court initially hoped to receive argument and evidence to assist it in construing all eight patents at issue. However, the number of disputed terms and the number of different patents at issue required the Court to focus that hearing almost exclusively on the ' 225 patent. Because of the similar subject matter and close relationship of the patents, which all list Kalman Strobel as an inventor, at the *Markman* hearing the Court urged the parties to attempt to focus the disputes and stipulate to the application of a single construction to identical or virtually identical terms appearing in all of the patents at issue. On August 27, 2001 the parties filed a Supplemental Joint Statement in which they agreed "that the disputed terms as they appear in all the Strobel patents shall be interpreted consistently, and that the prosecution history for each patent shall apply to all of the patents for purposes of claim interpretation."

FN1. The parties have asked the Court to construe the meaning of multiple terms in United States Patent Nos. 5,487,264 (the '264 patent), 5,437,149 (the '149 patent), 5,353,584 (the '584 patent), 5,129,220 (the '220

patent), 5,797,258 (the '258 patent), 5,581,993 (the '993 patent), 5,408,820 (the '820 patent), and 5,125,225 (the '225 patent).

Thereafter, the Court issued this order in draft tentative form and enabled the parties to object to it at a hearing conducted on November 1, 2001. The Court has considered their positions, and this order is the final order, but only as to the terms discussed herein. The Court will construe at least one additional term at a later date . FN2

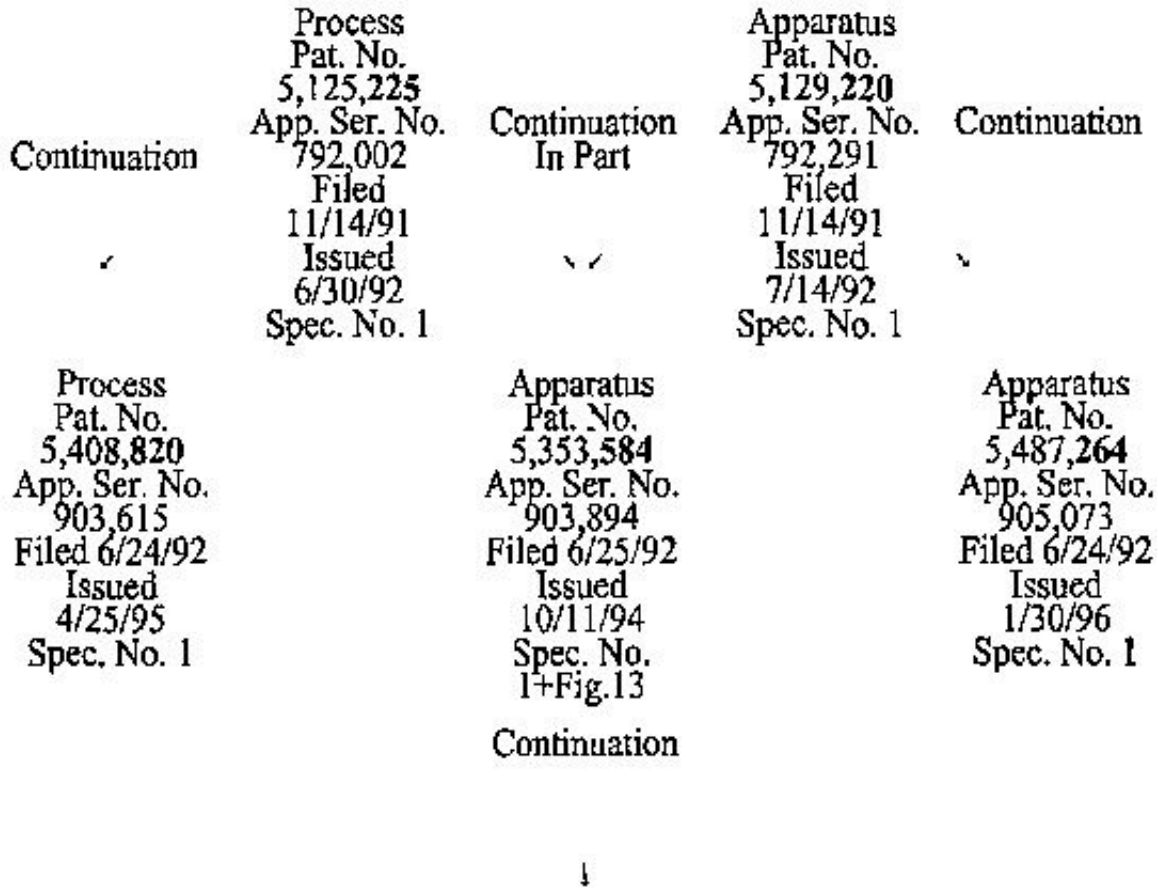
FN2. The parties included in their August 27, 2001 Supplemental Joint Statement the disputed term "said links having a curved outer wall portion spaced apart from said inner circumferential gap, said outer wall portion having a center opposite said inner gap, and said links having opposite said curved outer wall portion two inner wall portions separated from each other by said inner gap along said inner circumference of said annular links." However, that term was the subject of almost no evidence or argument at the initial hearing and, therefore, the Court began to receive evidence and argument about that term at the November 1, 2001 hearing.

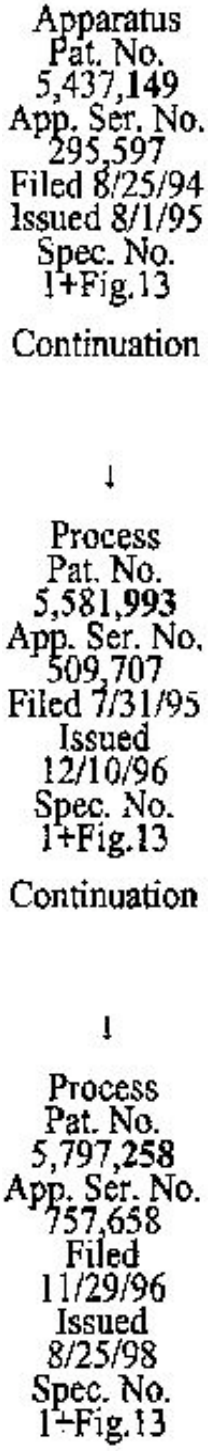
## BACKGROUND ON THE PATENTS

Plaintiff acquired the rights to the entire Strobel family of patents for $6 million during their prosecution. The Strobel family of patents originates from two applications containing the identical specification filed on November 14, 1991. Those original applications resulted in the issuance of the '225 and 220 patents. The '225 patent claims a method of manufacturing hollow diamond cut rope chain for jewelry and the '220 patent claims the hollow diamond cut rope chain product. The '264 and '820 patents resulted from continuation applications filed before the issuance of the '220 and '225 patents, respectively. The '220, '225, '264 and '820 patents all share the same specification. A continuation in part application filed on June 25, 1992 eventually resulted in the issuance of the '584, '149, '993 and '258 patents. The latter four patents share a common specification; however, that later version of the specification contains additional material consisting of Figure 13 and associated text (which are in all of the later-filed four patents). The '220, '584, '149 and '264 patents all claim hollow diamond cut rope chain and the '225, '820, '993 and '258 patents all claim a method of manufacturing hollow diamond cut rope chain. Figure 1 to this Order, see next page, illustrates the history and subject matter of the patents at issue.

Plaintiff accuses Defendants of infringing the '225, '993, '258, '149 and '264 patents. Defendants filed a counterclaim seeking a declaratory judgment of noninfringement or invalidity of those patents in addition to the ' 220, '584 and '820 patents.

**Figure 1: History of the Patents at Issue (the "Strobel Family" of Patents)**






At the initial hearing, Plaintiff suggested that the Court begin by construing the independent claims (1 and 7) in the '225 patent because, of course, if those claims are not infringed, then Defendants have not infringed the '225 patent. FN3

FN3. Defendants called no witnesses at the initial hearing on August 7, 2001; however, they had ample opportunity to cross examine Plaintiff's witnesses. Plaintiff put on testimony by Giuseppe Dal Monte,

Plaintiff's chief technician and engineer, and Stanley Szurlej, a person skilled in the art of manufacturing gold chains, to describe the processes described in the '225 patent and used in the industry. The Court struck the declaration and live testimony of David Coates, an expert in metallurgy, as not meeting the prerequisites for admitting expert testimony because he had no experience relevant to the issues in this case concerning the manufacture of gold chains. The Court did not consider the Declaration of Ronald W. Reagin, a patent attorney, nor did Mr. Reagin testify at the hearing.

## LEGAL STANDARDS FOR CLAIM CONSTRUCTION

"Claim construction is a matter of law for the court, but claim construction is 'not an obligatory exercise in redundancy' and therefore does not require the court to repeat or restate every claim term." Macrovision Corp. v. Dwight Cavendish Developments Ltd., 105 F.Supp.2d 1070, 1072 (N.D.Cal.2000) ( *quoting* U.S. Surgical Corp. v. Ethicon, Inc., 103 F.3d 1554, 1568 (Fed.Cir.1997)). The Court must interpret only disputed terms. *Id. (citing* Wang Laboratories, Inc. v. Mitsubishi Electronics America, Inc., 103 F.3d 1571, 1583 (Fed.Cir.1997)).

Claim construction begins and ends with the actual words of the claim. Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1248 (Fed.Cir.1998). In construing disputed claim terms, the court should look first to intrinsic evidence. Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996.). Intrinsic evidence includes the language of the claims, the specification, and the file history, if in evidence. *Id*. The file history is often important intrinsic evidence because any interpretation that is either provided or disavowed in the file history affects the claim scope. Renishaw, 158 F.3d at 1249 n. 3. In most situations, analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term. Vitronics, 90 F.3d at 1583.

Absent a special and particular definition created by the inventor, *e.g.,* the inventor acted as his own lexicographer, terms in a claim are to be given their ordinary and accustomed meaning. *Id*. at 1249. It is necessary to review the specification to determine whether disputed terms have been used by the inventor in a manner other than their ordinary meaning. Vitronics, 90 F.3d at 1582. Technical terms are interpreted from the perspective of persons skilled in the art. *See* Phillips Petroleum Co. v. Huntsman Polymers Corp., 157 F.3d 866, 871 (Fed.Cir.1998).

Extrinsic evidence refers to evidence that is external to the patent and its file history, such as expert testimony, inventor testimony, dictionaries, and technical treatises and articles. Vitronics, 90 F.3d at 1584. A court may rely on extrinsic evidence to construe claims, but only where the intrinsic evidence alone does not resolve any ambiguity. Vitronics, 90 F.3d at 1583. However, a court may consult extrinsic evidence to ensure that its claim construction is not inconsistent with how a person skilled in the art would understand the claim terms. Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1308-09 (Fed.Cir.1999). Moreover, the court may freely consult dictionaries and may rely on dictionary definitions when construing claims, to the extent the dictionary definition does not contradict a definition found in the patent documents. Vitronics, 90 F.3d at 1584 n. 6.

### I. CLAIM 1 OF THE '225 (PROCESS) PATENT

The first claim of the '225 patent reads as follows. (The claims whose meaning is disputed appear in bold.)

The process of manufacturing a hollow diamond cut rope chain comprising the steps of:

preparing a plurality of hollow segmented links, **said links having a toroid, annular configuration** interrupted by an inner gap along an inner circumference of said annular links, said links having a curved outer wall portion spaced apart from said inner circumferential gap, said outer wall portion having a center opposite said inner gap, and said links having opposite said curved outer wall portion two inner wall portions separated from each other by said inner gap along said inner circumference of said annular links, applying said links in a rope chain configuration;wrapping said links about a lathe drum; freezing said drum;applying water to said chain upon said frozen drum until said water, and said outer and said inner wall portions are frozen **advancing a blunt burnishing tool against said links to apply a plurality of incremental deformative thrusts of blunt force against said curved outer wall portions of said hollow links until said wall against which said deformative force is being applied is pushed back toward said opposite inner wall portions of said hollow link,** said outer wall portions being flattened by said application of said incremental blunt force.

**A. "ADVANCING A BLUNT BURNISHING TOOL AGAINST SAID LINKS TO APPLY A PLURALITY OF INCREMENTAL DEFORMATIVE THRUSTS OF BLUNT FORCE AGAINST SAID CURVED OUTER WALL PORTIONS OF SAID HOLLOW LINKS UNTIL SAID WALL AGAINST WHICH SAID DEFORMATIVE FORCE IS BEING APPLIED IS PUSHED BACK TOWARD SAID OPPOSITE INNER WALL PORTIONS OF SAID HOLLOW LINK"**

Defendants construe "advancing a blunt burnishing tool against said links to apply a plurality of incremental deformative thrusts of blunt force" to mean "moving a blunt burnishing tool forward against the frozen links to apply blunt force in a series of small incremental thrusts ..." At the hearing Defendants argued that the word "thrusts" requires a "hammering"-like movement of the burnishing tool against the links to flatten the links and yield a finished product that appears to be faceted.

Plaintiff disagrees, in part because the "hammering" or "pounding" embodiment was not part of the original Strobel patents and was not even disclosed until the later patents, *e.g.,* the '993 patent. Plaintiff argues that the entire phrase "advancing a blunt burnishing tool against said links to apply a plurality of incremental deformative thrusts of blunt force against said curved outer wall portions of said hollow links until said wall against which said deformative force is being applied is pushed back toward said opposite inner wall portions of said hollow link" means "successively applying a blunt deformation tool against small portions of the outer curved surface of the links gradually deforming the surface against the inner wall."

Both parties correctly suggest that resort to the specification is necessary to interpret this language. Referring to the figures in the specification, *e.g.,* Element 60 of Figure 12 (p. 195), FN4 reveals that the tip of the burnishing tool is in fact slightly curved rather than straight across. This is supported by the testimony of Szurlej at the hearing that in his experience in the art, the tip of a burnishing tool is curved, must be curved and, therefore, presumably would be interpreted by anyone reasonably skilled in the art who reads the patent to have a curved tip.

FN4. Page references are to the initial Joint Statement of Disputed Claim Terms filed on July 23, 2001 unless otherwise indicated.

"[A] plurality of incremental deformative thrusts of blunt force" may encompass the narrow definition urged by Defendants wherein the burnishing tool moves up and down, perpendicular to the lathe drum, to

"hammer" or "pound" the links. However, the shape of the burnishing tool tip as illustrated in the specification, and as interpreted by those skilled in the art, is curved. Therefore, when the curved burnishing tool moves longitudinally along the surface of the spinning lathe drum, the longitudinal advance of the burnishing tool combined with the spinning of the links on the lathe drum result in the application of "incremental deformative thrusts of blunt force" to the links as the burnishing tool moves passed them. At the hearing and in his declaration, Dal Monte demonstrated that the lathe drum turns at such a rate and the burnishing tool moves longitudinally at such a pace that each link is "struck" roughly 60 to 70 times in a single pass of the burnishing tool across the length of the lathe drum. Thus, the longitudinal increment that the burnishing tool moves in the time it takes for any single link to make one rotation on the lathe drum would be equivalent to roughly 1/60 of the width of a link. And, because the tip of the burnishing tool is curved, each incremental longitudinal movement of the burnishing tool results in the incremental application of a slight thrust or force toward the link and the lathe drum, which in turn slowly deforms the outer wall of each link.

In short, the actual use and practice of the invention by Plaintiff appears to be consistent with the description in the specification and the language of Claim 1 in the '225 patent. There is, accordingly, no reason to limit Claim 1 to a pounding or hammering application of force to the links as urged by Defendants. In any event, the "forward" movement of the burnishing tool toward the lathe drum, that Defendants argue is required, is present in the invention as the Court has described it because as the tip of the burnishing tool moves longitudinally along the lathe drum, the curved tip results in the application of a force toward the center of the lathe drum as it moves.

The Court therefore construes the disputed language to include Plaintiff's preferred embodiment and to mean "successively applying a plurality of incremental forces to the links by means of a blunt burnishing tool until the outer wall of the hollow link is pushed inward toward the inner wall of the link."

**B. "SAID LINKS HAVING A TOROID, ANNULAR CONFIGURATION"**

Defendants contend that because the words "toroid" and "annular" were at times used together and at other times one or the other word was used alone to describe a given shape appearing in the figures of the specification, the inventor used the words interchangeably and, therefore, they must be interpreted such that a single meaning is attributed to the terms "toroid," "annular" and "toroid, annular." That single meaning, Defendants contend, is "such links are round or circular in cross section, like a ring, with a hole in the center, like a donut."

Plaintiff counters that "toroid" and "annular" are not synonyms, rather they have distinct but not mutually exclusive definitions. Plaintiff suggests that no claim construction is necessary because these terms were used consistently with their ordinary dictionary definitions, which are clear on their face:

***toroid*** **:** a surface generated by the rotation of a plane closed curve about an axis lying in its plane and not intersecting it; a body whose surface has the form of a toroid

***annular:*** of or relating to a ring: forming a ring: shaped like a ring

Webster's Third International Dictionary (1966).

Plaintiff's primary contention is that neither toroid nor annular require any specific cross-sectional shape, but

rather describe general classes of three-dimensional bodies. More precisely, Plaintiff contends that a toroid is always annular, but something that is annular is not always a toroid because it may vary in thickness about the circumference. Moreover, according to Plaintiff, neither a toroid nor an annular shape is necessarily round in cross-section despite the fact that both are indisputably generally round about their circumference.

A prototypical "donut" shape ( *see* Figure 2 of this Order) is both round about its circumference and round in cross section ( *see* Figure 2a of this Order), *i.e.,* when cut in half through a diameter, two circles are revealed ( *see* Figures 2b and 2c of this Order). FN5 Such a shape is both a "toroid" and "annular." Both sides agree on that much. Plaintiff, however, refers to the dictionary definition of toroid that is not limited to a circular cross section, but can be generated by any "plane closed curve" rotated about an axis. On that basis, Plaintiff contends that a toroid need not be of any particular cross-sectional shape, rather any "plane closed curve" will do. Plaintiff provided examples of other simple toroids. *See* Coates Decl. Ex. D, at 14 (attached to this Order as Attachment A). Those include rotating a square and a triangle "about an axis lying in its plane and not intersecting it." The Court also identified an example of a toroid of elliptical cross-section that is depicted in Figure 3 to this Order.

FN5. Figures 2-3 of this Order are intended to merely be demonstrative aids to help the reader visualize the Court's construction and the plain meaning of "toroid" and what the parties meant by a cross-section of such a shape. Figures 2-3 were not submitted by either side as evidence or otherwise; instead, they come from web sites that the Court visited in search of visual aids to be incorporated into this Order after the Court made its own independent assessment of what a "toroid" is, based on intrinsic evidence and dictionary definitions.

**Figure 2: A Donut-Shaped Toroid**

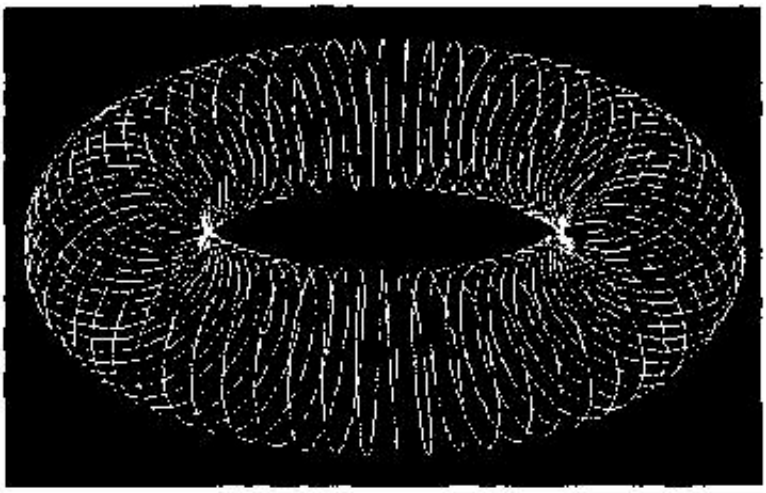


**Figure 2a: A "Donut" Shape Is "Round" in Two Ways**

**Figure 2b: A Donut-Shaped Toroid Has a Circular Cross-Section**

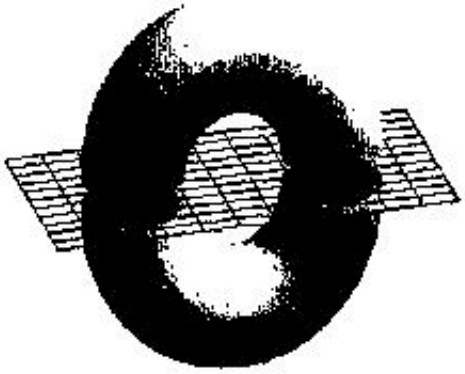


**Figure 2c: Circular Cross-Section of a Donut-Shaped Toroid From Another Perspective**

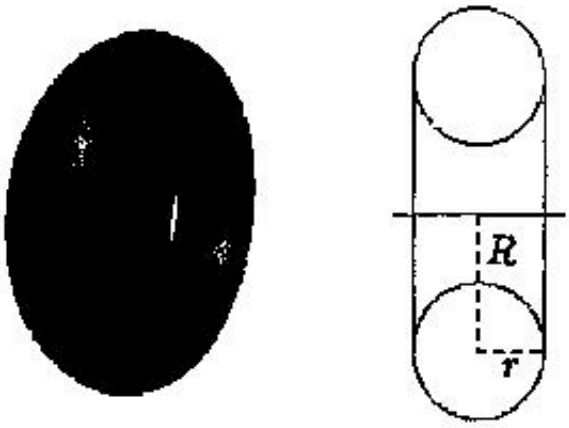



**Figure 3: A Toroid Of Elliptical Cross-Section**

Plaintiff concedes that only a toroid that is generally circular in cross-section is disclosed in the specification of the patents. The specification refers to two types of hollow tubes each requiring a separate type of inner support during formation. One type is "a basically toroid donut shaped link" and the second type of tubular link is seamed and "generally toroid donut shaped in configuration, but which presents an [sic] circumferential gap or 'seam' on the inner circumferential surface, similar in shape to an automobile tire ..." *See* '225 Patent at Col. 4:2-16.

Although the inventor may have at times used the terms "annular" and "toroid" separately in the specification, nothing indicates they were intended to be interchangeable. All of the figures and descriptions in the specification are of links that are both toroid *and* annular, as both sides admit, because they are generally donut shaped and of circular cross-section. But nothing in the terms "toroid," "annular," or "toroid, annular" expressly limits the invention to links of circular cross-section. Therefore, it is both entirely correct and internally consistent to refer to the disclosed links as being "toroid," "annular" or "toroid, annular."

Defendants also point to the prosecution history pf the '220 patent where, in response to a rejection for indefiniteness, the applicant changed the description of the links from "said links formed from a hollow tubing which is curved about the axis" and "said hollow tubing having a curved circumference in cross-

section" to the language at issue: "having a toroid, annular configuration." *See* D & W Ex. 12. FN6 That modification, standing alone, does not indicate that the claims were being restricted to links that are generally "round or circular in cross section, like a ring, with a hole in the center, like a donut." If anything, the adoption of the "toroid, annular" description could indicate that the applicant intended not to be so limited. Neither the applicant nor the examiner appear to have construed the new "toroid, annular" description as limiting the claims to shapes that are generally "round or circular in cross section, like a ring, with a hole in the center, like a donut." FN7

FN6. The examiner asked whether the confusing initial language "impl [ied] that the tubing is round?" *See* D & W Ex. 11 at 2.

FN7. In reaching this conclusion, the Court is not expressing a view of the correct construction of the language referred to in footnote 2.

In fact, the parties agreed that the file histories of certain of these patents contain a May 20, 1992 letter from Professor Thomas Banchoff, a mathematics professor, defining "toroids" to include a broad range of shapes that are not necessarily circular in cross-section.FN8 That letter appears in at least the '820 and ' 584 patents. Rather than narrowing the definition, this prosecution history, from the information disclosure statements, actually clarifies that the word "toroid" was not being limited to shapes of circular cross-section.

FN8. See Court Exhibit 1, received into evidence at the November 1, 2001 hearing.

Therefore, the Court adopts the plain meaning of the terms "toroid" and "annular" in interpreting the claims. There is no persuasive indication that those terms were defined in any way that is inconsistent with their broad dictionary definitions, *i.e.,* the applicant was not his own lexicographer. Moreover, the use of the terms "basically toroid," "generally toroid" and "annular" in the specification, either alone or together, do not limit the links to any specific cross-section. The term "said links having a toroid, annular configuration" is construed to mean "the links have an overall ring-like shape of uniform cross-sectional shape and thickness around the circumference of the ring." The word "toroid" standing alone shall be given its ordinary dictionary definition quoted above as will the word "annular." There is no indication that the applicant attributed any different meaning to any of these terms in the different patents at issue. Therefore, this construction of "toroid," "annular," and "toroid, annular" shall apply to all the Strobel patents involved in this case.

**C. THE EFFECT AND CONSTRUCTION OF THE PREAMBLE LANGUAGE: "THE PROCESS OF MANUFACTURING A HOLLOW DIAMOND CUT ROPE CHAIN COMPRISING THE STEPS OF"**

Defendants ask the Court to construe the preamble of Claim 1 as a limitation, apparently on the subject matter of that claim. *See* p. 201, '225 Patent at Col. 11:36-37. More specifically, Defendants seek to limit the scope of Claim 1 and its dependent claims to a "rope chain," which allegedly has a specific meaning in the art. Plaintiff argues that the term "rope chain" may not be read in from the preamble as a limitation on the claims because the use of such a description in the preamble of a process claim is not necessary to "breathe life and meaning" into the claims.

The body of Claim 1 of the '225 patent very clearly defines and limits the scope of the invention without reading in the preamble as a limitation. The body spells out the limitation "applying said links in a ***rope chain*** configuration." *See* p. 201, '225 Patent at Col. 11:49 (emphasis added). In other words, the preamble of Claim 1 is not at all "essential to point out the invention defined by the claim." Bell Communications Research, Inc. v. Vitalink Communications Corp., 55 F.3d 615, 621 (Fed.Cir.1995) ( *quoting* Kropa v. Robie, 187 F.2d 150, 152 (C.C.P .A.1951)). Therefore, since "the body of the claim fully and intrinsically sets forth the complete invention, including all of its limitations, and the preamble offers no distinct definition of any of the claimed invention's limitations ... the preamble is of no significance to claim construction because it cannot be said to constitute or explain a claim limitation." Pitney Bowes, 182 F.3d at 1305. The preamble of Claim 1 simply does not define any limitations that are not already express or implicit in the body of that claim. Thus, the Court need not construe the preamble.

**D. THE TERM "ROPE CHAIN" WILL BE DEFINED AS IT APPEARS IN THE SPECIFICATION**

To the extent the parties ask the Court to construe the term "rope chain," which appears in the body of various claims, the Court hereby adopts the definition set forth in the specification. *See* '225 Patent at Col. 1:21-26 (p. 196 of Jt. Statement). That definition requires that the links be "woven," or "intertwined" to form a "helicoid chain" or a "double helix" that "resembles a rope. *See* id. This definition comports with common sense, and, in any event, the Court declines to depart from the applicant's definition of "rope chain" as it appears in the specification.

**II. Claim 7 of the** '225 Patent

The seventh claim of the '225 patent reads as follows.

The process of manufacturing a hollow diamond cut rope chain comprising the steps of: preparing a plurality of hollow segmented seamless links, **said links having a toroid, annular configuration;** applying said seamless segmented links in a rope chain configuration; wrapping said links about a lathe drum; freezing said drum; applying water to said chain upon said frozen drum until said water is frozen; **applying a blunt burnishing tool against said links to apply a one or more incremental deformative thrusts of blunt force against an outer wall portion of said seamless links until said outer wall portion against which said blunt force is applied is pushed back toward an opposite inner wall portion of said seamless links,** said outer wall portion being flattened by said application of blunt incremental force.

The meaning of the terms that appear in bold above are, again, those that are heavily disputed; however, no party appears to contend that the disputed language in Claim 7 should be construed materially differently, though the language is slightly different, than that in Claim 1. The Court agrees and applies the same construction-as to the disputed terms in bold-to Claim 7 as to Claim 1.

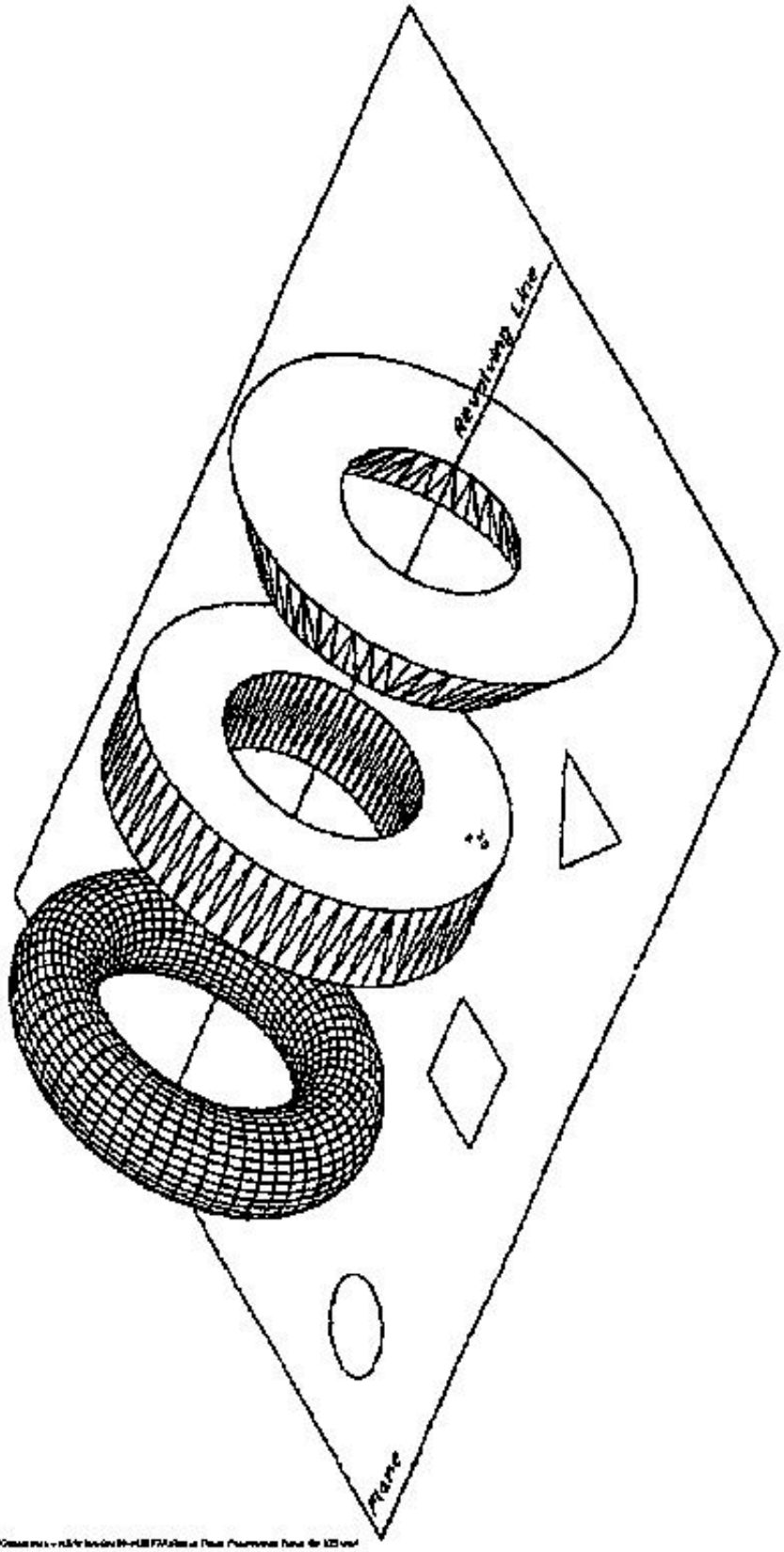
**CONCLUSION**

For all the foregoing reasons, and good cause appearing therefor, the Court construes the disputed terms as described in the foregoing order.

IT IS SO ORDERED.

**ATTACHMENT A**

**ATTACHMENT A**



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