KEY ISSUES IN A MANUFACTURING AGREEMENT
FROM THE MANUFACTURER'S PERSPECTIVE

I. Type of Agreement

A. Manufacturing Services Agreement – the manufacturer builds the customer's product to the customer's specifications. The "customer" is the manufacturer's only customer.

B. Product Agreement – the manufacturer builds its own product and sells it to multiple customers. This is sometimes called an "ODM Agreement" ("Original Design Manufacturing Agreement")

II. Warranty/Acceptance/Epidemic Failure

A. Differences Between the Warranty, Acceptance and Epidemic Failure.

1. Acceptance: Trigger of the customer's payment obligation (until the product is accepted, the customer can reject the product and refuse to pay for the product). It is important to limit the reasons for which the customer can reject the product to defects which are covered by the warranty.

2. Warranty: Promise that the product will continue to satisfy certain criteria after acceptance. Warranty remedies are generally limited to "repair, replace, or credit."

3. Epidemic Failure: Generally a method for the customer to obtain (i) a longer warranty or (ii) warranty remedies in addition to "repair, replacement or credit."

B. Acceptance. "Acceptance" is an important legal concept, since the customer's obligation to pay for product arises upon acceptance**.** The acceptance period should be limited to a certain number of days following receipt of the product; if the product has not been rejected during this time frame, it should be deemed accepted. The range of acceptance periods is 20-60 days, with the majority of contracts having a 30-day period. Absent a contractually agreed acceptance period, acceptance is governed by Section 2-606 of the Uniform Commercial Code ("UCC"), which provides that acceptance is deemed to occur when the buyer fails to reject the goods within a "reasonable time" (which might reach 90 days). The manufacturer should include a clause in the agreement stating that the customer cannot reject a product based on tests which the manufacturer does not conduct. It is critical to review the acceptance period in light of the payment terms clause. The payment terms clause should always follow the shipment date (which is in the control of the manufacturer) rather than the acceptance date (which may not be). Consider the following:

1. Manufacturer ships product to the customer on March 1, 2011. On March 30, the customer returns the product to Manufacturer, stating that the product is defective. This constitutes a rejection of the product and (assuming that the defect is covered by the Manufacturer's warranty), and Manufacturer must correct the defect. The customer has no obligation to pay the invoice associated with the product. Manufacturer should probably issue a RMA (return materials authorization, the typical way manufacturer's handle defective product claims) for the full value of the product, repair or replace the product (assuming that the

defect is covered by the Manufacturer's warranty), and re-invoice the customer upon shipment of the repaired or replaced product.

2. Manufacturer ships product to the customer on March 1, 2011. On July 15, the customer returns the product to Manufacturer, stating that the product is defective. Because the acceptance period has passed, the customer's remedies are governed by the warranty clause. Unlike the prior example, the customer has an obligation to pay the invoice associated with the product. Rather than permit the customer to delay payment of the invoice by crediting the customer with the purchase price of the product, fixing the product, and then re-invoicing the customer for the product, Manufacturer should probably issue a RMA at "zero value" (which shows that the product left the facility, but at a value of "zero" so that it does not create an credit in the customer's favor), repair or replace the product (assuming that the defect is covered by the Manufacturer's warranty), and ship the product back to the customer at "zero value."

3. The difference between acceptance and warranty is most easily illustrated by the use of an electronics example. When one buys a tablet and the tablet breaks down within a couple of days thereafter, that buyer can usually return the tablet to the store and get a replacement tablet or refund. This is because the tablet has not yet been "accepted." However, after a period of time (the acceptance period) has passed, the electronic supplier will not generally replace the tablet or provide an immediate refund. Rather, the electronic supplier will ask the customer to leave the tablet with them so that they can repair it (or have it repaired by a third party). The customer is still responsible for making payments towards the product in the event the customer financed the products.

4. While the foregoing principles apply in the manufacturing industry, it is often difficult to get the customer to agree to pay for a non-working product. Many customers confuse "acceptance" with "warranty" and will attempt to offset against a receivable the value of any product it returned to Manufacturer, regardless of whether the return constituted a "rejection" of the product (in which case the offset is legitimate) or a warranty claim (in which case the offset is not legitimate). In general, this raises only a timing issue. However, when the customer is financially unstable (e.g., on the verge of bankruptcy), Manufacturer will probably want to strictly distinguish between acceptance and warranty. First, the Manufacturer will not want to invest time and resources repairing a product under warranty for which it has not been paid. (For example, assume the product was shipped on March 1 and the agreed acceptance period was 30 days. On May 15, the customer returns the product to Manufacturer and offsets the invoice for the product against its receivable balance. Manufacturer would not want to repair the product unless it could be assured that it would be paid for the product). Second, the Manufacturer might want to maintain its right to commence a legal action against the customer immediately following the breach - before the customer becomes insolvent).

5. In the event Manufacturer chooses not to enforce the concept of "acceptance" (e.g., Manufacturer takes product back at full value and reinvoices upon reshipment), Manufacturer should take steps to ensure that it is not waiving its right to later require full compliance with the acceptance clause. For example, the Manufacturer should consider sending the customer a notice advising the customer that it is permitting an offset in this particular case, but that in future instances of product warranty claims should be handled in accordance with the warranty section and are not subject to an offset or waiver.

C. Warranty. The warranty clause is one of the most heavily negotiated clauses in manufacturing agreements. What follows are some of the key issues.

1. Duration.

(a) When should the warranty commence (upon manufacture or delivery of the product to the customer)?

(b) What happens if the product has been manufactured, but the customer continues to delay delivery of the product? If the manufacturer warrants components, the component warranty might expire, but the manufacturer might still be liable to customer in the event the components are defective.

(c) How long should the warranty remain in effect? The standard varies from industry to industry, and longer warranties can be negotiated and priced into the agreement.

2. Coverage

(a) Generally, manufacturers will warrant only their workmanship (e.g., that the product is manufactured and tested in accordance with certain manufacturing standards and/or the customer specifications for manufacture and test). Manufacturers might also warrant the production materials (e.g., solder, epoxy, glue, labels).

(b) Manufacturers do not want to warrant components they purchase from third parties.

1. It is often difficult to match the durations. For example, in order to deliver the product on December 15, Manufacturer must ensure that all components have been delivered no later than December 15 (in order to allow time to manufacture and test the product). If the customer then pushes delivery out to March 1; the component vendor's one year warranty would likely expire the following December 15 (on the date the components were delivered to Manufacturer), but the warranty from Manufacturer to the customer would not expire until March 1 (assuming that the warranty period commences on delivery of the product).

2. It is often difficult to match the remedy. Most component suppliers will limit the remedy to "repair, replacement or credit," and will not cover any incidental, special, indirect or consequential damages. A defective resistor or capacitor might cost less than a penny, but could cause thousands of dollars in damages if the product must be scrapped, or hundreds of dollars in damages if the product must be shipped to the Manufacturer to be reworked and then shipped to the customer once rework is complete.

3. If the components are specified by the customer, the Manufacturer has no leverage/relationship with the Component vendor. This is generally the case for high dollar components.

4. Therefore, the Manufacturer will often not independently warrant third party components, but may offer to enforce any warranty it

does obtain from the component supplier provided that the customer pays Manufacturer's costs for enforcing such warranty. (Because the warranty might not be assignable, it is possible that only the Manufacturer will have privity of contract and be entitled to enforce the warranty; however, lawsuits are costly, and the Manufacturer might not want to be forced to absorb the cost of a lawsuit)

(c) Examples:

1. Assume that Manufacturer ships a product to Customer ABC. One of the Components in the product is a cable manufactured by Company X. European law requires that the cadmium level of the cable be under 0.01%. Unbeknownst to Manufacturer, the cadmium level of some of the cables exceeded this amount. The Customer's shipments were seized by customs, and the customer lost the sale because the end-user cancelled its agreement with the customer. The customer claimed that the product didn't meet the specifications, and has offset its payables to Manufacturer by the damages it claims that Manufacturer owes it. If Manufacturer limited its warranty to workmanship only, it would have no responsibility for the cables. However, if Manufacturer independently warranted the components, it would be responsible for the defect (the excessive cadmium level of the component) and any related liability and damages, to the extent not otherwise limited in the agreement.

2. Assume that the customer's approved vendor list requires that Manufacturer purchase connectors from XYZ. Manufacturer received 100 connectors from XYZ, incorporated them into products, tested the products, and when the products passed the test, shipped the products to the customer. Six months later, a latent defect appears in the connector. Consistent with the warranty Manufacturer received from XYZ, XYZ offers to repair or replace the connector, but refuses to reimburse Manufacturer for its cost to repair the product (or, worse yet, the product cannot be repaired and must be scrapped!). The cost of 100 connectors is less than $1, but the cost to retrieve the products from the field, repair or replace them, and ship the product back to the customer exceeds $75,000. If Manufacturer warranted the connector, it will have to absorb the $75,000 cost.

3. Assume the same fact pattern as in (2), except that the latent defect appears 11 months after shipment and that Manufacturer was able to negotiate a vendor warranty whereby the vendor (XYZ) was required to pay for any consequential damages caused by the connector (e.g., repair and replacement costs). Assume further that, by the time the latent defect appears, XYZ filed for bankruptcy. Under Manufacturer's standard warranty, the cost of a replacement part and the cost to repair or scrap the product are chargeable to the customer; had Manufacturer warranted the components, Manufacturer would have to bear these costs itself. Lesson learned: even if Manufacturer negotiates a satisfactory warranty with the vendor, it should still not warrant the component to the customer so as to avoid

being“guarantor” of the vendor’s obligations in the event the vendor fails to/cannot honor the warranty.

4. Assume that Manufacturer buys printed circuit boards (“PCB’s) from ABC for use in customer’s set-top video boxes. ABC warrants the PCB’s for twelve months. Manufacturer warrants the boxes (to the customer) for eighteen months. Thirteen months into the warranty period, the customer returns 100 boxes to Manufacturer. Manufacturer determines that the boxes failed as a result of a defective PCB. In the event Manufacturer warranted the PCB, Manufacturer would be obligated (under its warranty to the customer) to replace them, but would have no recourse from the vendor because the PCB’s are outside of the vendor’s 12-month warranty.

3. Exclusions from Warranty. Warranties typically exclude products that have defects or failures resulting from:

(a) the customer’s design of products including, but not limited to, design functionality failures, specification inadequacies, failures relating to the functioning of products in the manner for the intended purpose or in the specific customer’s environment;

(b) accident, disaster, neglect, abuse, misuse, improper handling, testing, storage or installation including improper handling in accordance with static sensitive electronic device handling requirements;

(c) alterations, modifications or repairs by the customer or third parties (without appropriate certification or training);

(d) defective customer-provided test equipment or test software; or

(e) the failure of the customer-approved test plan to detect such a defect.

In addition, sample products (prototypes, first articles, preproduction units) are generally sold without a warranty, with the understanding that they will not be placed into commerce.

4 Warranty Disclaimers.

(a) It is critical that the manufacturer disclaim all warranties other than the express warranties it makes. Such a disclaimer is acceptable under the UCC, and failure to include such a disclaimer may result in the manufacturer having been deemed to make various implied warranties (such as the implied warranty for merchantability and fitness for a particular purpose) and warranties under the UCC (such as warranty of title).

(b) The typical disclaimer is:

MANUFACTURER MAKES NO REPRESENTATIONS AND NO OTHER WARRANTIES OR CONDITIONS ON THE PERFORMANCE OF THE WORK, OR THE PRODUCTS, EXPRESS, IMPLIED, STATUTORY, OR IN ANY OTHER PROVISION OF THIS AGREEMENT OR COMMUNICATION WITH CUSTOMER, AND MANUFACTURER

SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT.

5 Remedies for Breach of Warranty

(a) The sole remedy for a breach of warranty should be, at the manufacturer's option, the repair of the product at a manufacturer-designated facility, the replacement of the product, or (if the manufacturer determines that the product cannot be repaired or replaced), the credit of the purchase price of the product. This is important to guard against customers seeking reimbursement for time they spend testing, repairing or replacing the product or similar damages. Query whether the manufacturer should limit the remedy to a depreciated value of the product in the event the product cannot be repaired or replaced (e.g., if the manufacturer sells a product with a three year useful life and it fails after two years, should the customer get 100% of its money back or should its recovery (in the event repair/replacement are not feasible) be limited to 33% of the purchase price)? Providing a right to a refund might impact revenue recognition, so one should be careful about including such clauses.

(b) At times, the customer seeks assurances that warranty repairs will be made within a particular amount of time. The manufacturer should avoid committing to a specific turn-around time to make the repairs. (What if Components are not available? What if the product hasn't been manufactured for a while, but is still under warranty?)

(c) It is critical that whatever remedies are agreed for breach of warranty (and, if additional remedies are agreed upon for an epidemic failure (see below), then for an epidemic failure) are the "sole and exclusive" remedies for any failure of the product to meet the Specifications and that they be subject to the agreed-upon limitation of liability clause. Sophisticated customers will try to provide that the warranty remedies are nonexclusive or (worse), request that the indemnify them for all product defects.

D. <u>Design and Build Agreements</u>.

1. Occasionally, a manufacturer will design and build a product. From a manufacturers' liability perspective, it is often better to have two separate agreements – one covering the design and the other covering the manufacture of the product.

2. In design agreements, the entity doing the design (in this case, the manufacturer) will want to (i) impose a limited remedy (e.g., redesign) for any breach of the design warranty and (ii) limit its liability to a reasonable amount (e.g., the amount paid for the design). The customer will want significantly broader remedies.

3. Once the product (designed by the manufacturer) goes into production, the question of warranty surfaces. Does the manufacturer (who designed the product) warrant the design? Does the manufacturer warrant the materials that it selected for the product? Does the manufacturer provide any warranties (or indemnities) in the event the product infringes a third party's intellectual property? Or, does the manufacturer warrant only its workmanship.

4. The more the design relationship approaches a "contract design engagement" (where the customer owns all of the intellectual property created during the design, other than any background intellectual property of the manufacturer, for which it retains only a license), the more reasonable it is for the manufacturer to seek to limit is liability for the design. In such cases, it is critical that the design warranty and the limitation of liability set forth in the design agreement limit the manufacturer's liability for design once the manufacturer has begun production of the product.

5. For example, assume that customer paid Manufacturer $1.5 million to design a portion of the layout of customer's product. The customer accepts the design, and the Manufacturer commences production. Assume that ten months later, the parties discover a latent defect in the design (or a third party sues customer for infringement alleging that the design Manufacturer created infringed its intellectual property). Manufacturer's liability could be significantly limited if the cap set forth in the design agreement is effective; if Manufacturer warrants the design against latent defects and/or infringement in each of products it manufacturers, its liability could be significant.

E. Quality-Related Provisions.

1. Many agreements contain several quality-related provisions, many of which appear fairly innocuous. For example, an agreement might require that "all products be manufactured and tested in accordance with XYZ Specification." It is critical, however, that the quality section be drafted in a manner which does not provide the customer with unintended remedies.

2. As stated above, most manufacturing agreements provide that the "sole and exclusive" remedy for a warranty defect is the repair or replacement of the product or a credit in the amount of the purchase price of the product in the event the product cannot be repaired or replaced. It is critical that any separate quality clause in the Agreement be subject to these exclusive remedies.

F. Epidemic Failure

1. Many times, the customer will ask for an epidemic failure ("EF") clause; often, the customer will not know why they need it. Most of the time, the customer's concern is covered by the warranty clause: if the product is defective within the warranty period, the warranty gives the customer the right to send the product back for repair or replacement (or, in certain cases, credit). In general, an EF clause contains two concepts not offered under the warranty clause: (i) an extension of the warranty under certain circumstances or (ii) an extension of the remedy provided in the warranty clause.

   (a) In order for a product to be covered under the warranty clause, it must exhibit a defect during the warranty period. A customer might be concerned that a latent defect might appear towards the end of the warranty period and, in the event it does not return the product during the warranty period, it might be left without a remedy. For example, assume that Manufacturer shipped 1000 units on June 1, 2011. Between April 20, 2012 and May 15, 2012, forty of the units failed, and the failure was attributable to the same root cause. The fact that the forty units' failure was attributable to the same root cause makes it more likely that the remaining 960 units might have the same defect. However, unless the 960 units fail before May 31, 2012 (the expiration of the one year warranty), the customer will be left without a remedy. Providing the

customer with a longer warranty period in the event of an epidemic failure is an easy solution to this problem.

(b) The standard warranty limits the customer's remedy to "repair, replacement or, if the product cannot be repaired or replaced, credit." Often, customers will argue that the remedy is insufficient to compensate them for (i) any costs of a product recall ("PR") should one need to occur and (ii) the internal time customer spends handling the epidemic failure. Remember that a key difference between the "warranty" clause and the EF clause is that, while the warranty applies to and provides a remedy for products known to be defective, the EF/PR clause applies to products suspected of being defective, In the example set forth above (where 40 units out of 1000 exhibited the same root cause), the customer might choose to inspect (or recall and inspect) the remaining 960 units to ensure that they are not defective (or, if they are defective, to repair or replace them). In fact, the law or customer's policy might require such a recall. What happens if none of the 960 recalled units is defective? Because they are not covered by the warranty (because they are not defective), the customer ordinarily would bear this cost…absent an epidemic failure-type clause.

(c) Giving the customer an epidemic failure remedy is not only costly but might also be misused. In the example above, assume that the 40 (of the 1000) units that were defective were manufactured during one shift in the week of August 20, 2011, and the Manufacturer has isolated the cause of the defect to a particular individual working that particular shift. Manufacturer would want to limit any recall to the units produced during that shift. The customer might require that all units be recalled. The difference between the costs of these two remedies is significant.

2. It is difficult to define the appropriate triggers for an EF. At a minimum, the triggers should include

(a) A certain percentage of defects found during a particular 90-day period. Obviously the higher the threshold, the less likely the EF clause would be triggered.

(b) A minimum number of units found to be defective. This is to make sure that there is truly an EF. For example, if the trigger is 4%, but only 50 units were produced, then two defective units whose defect is attributable to the same root cause would constitute an EF because 4% of 50 is two. At a minimum, there should be some minimum number (e.g., a minimum of 20 units) in order to trigger the EF obligations.

3. Query whether product recall insurance is available and, if so, whether it provides appropriate coverage. First and second party coverage is generally available, but covering the cost of the customer's (second party) damages can be very expensive as their products may be many multiples of the value of the manufacturer's products. First party coverage will normally not cover all of the manufacturer's (first party) costs, but will cover a portion of them once the deductible has been reached.

G. Non-Product Warranties. Often, customers will request "warranties" for non-product matters. For example, a customer might request that the manufacturer "warrant" that it complies with laws. (See discussion about "compliance with laws" below). While in the US, there is not a significant difference between a warranty and a covenant, this is not

the case in other jurisdictions. It is probably best to include these as covenants rather than warranties in order to limit liability.

III. Limitation of Liability/Liquidated Damages

A. General. It is common practice for manufacturing agreements to include limitation of liability ("LOL") clauses. Absent an agreement explicitly limiting a seller's liability, a seller is liable for incidental damages (generally charges, expenses or commissions incurred in connection with effecting cover and other reasonable expenses incident to the delay or other breach) and consequential damages (including loss of profits, value add damages, line down charges, and other damages which are reasonably foreseeable). Thus, the limitation of liability is arguably the most important clause in the Agreement. The manufacturer cannot rely on the limitation of liability clause in the battle of the forms to protect it. Rather, because the UCC favors the buyer, unless the limitation of liability clause appears in the buyer's form also (which it rarely does), the seller will not have any such protection. Typically, these clauses contain the following limitations.

1. Exclusion of certain damages.

(a) LOL clauses typically exclude incidental, special, indirect, consequential (and punitive) damages, limiting the manufacturer's damages to "actual direct damages." While "lost profits, loss of use and lost revenue" are the quintessential consequential damages, in the manufacturing area, "value add" damages might be equally important, and the manufacturer might want to specifically disclaim those damages. For example, a chip manufacturer knows that its $100 chip might be incorporated into a motherboard and, ultimately, a computer, which wholesales for $800. If the chip is defective and the computer must be scrapped, does the chip manufacturer want to be exposed to $800 worth of damages? (See below for other ways to limit value add damages).

(b) Because courts have not been uniform in their approach to determining whether an element of damages is "direct" or "consequential," one should consider listing typical damages which would be considered consequential. These damages might include loss of earnings, profits or revenue from the transaction that is the subject of the agreement, which a court might otherwise consider as a "direct damage." Other damages which one might attempt to define as "consequential" include loss of use of an asset; loss of business, reputation or goodwill; loss of business opportunity, lost sales or lost contracts; loss of management or employee productivity; wage or salary increases or other inflationary costs of labor; increase in financing costs, cost of capital, administrative fees, legal fees or overhead or failure to realize expected savings; business interruption; shutdowns or service interruptions; inventory charges; lost data or information; and loss of product.

(c) A manufacturer should also consider limiting the customer's rights to recover their "costs of cover". For example, if Manufacturer sells its computer for $800, but the competitor sells its computer for $1,200, Manufacturer's breach of contract (e.g., late delivery, defective product which has not been repaired) might permit the customer to purchase the $1,200 computer and charge the manufacture $400 (the difference between the $800 and $1,200).

(d) A key element of damages is the non-breaching party's claim for "internal time" spent remedying a breach. One might consider whether

this should be excluded as a “direct damage” or otherwise cap this portion of the claim.

(e) One might also consider whether to exclude “line down charges” if the product being manufactured will be used in customer’s product (and the failure to timely deliver the product would cause the customer’s line to be down situation where the customer has to pay for idle labor and machine time without being able to manufacture its product)

(f) One might also want to consider whether “penalties” or “liquidated damages” payable to a third party constitute direct damages under a contract and, if so, whether they should be separately capped.

(g) By definition, a party is not responsible for damages in the event of a force majeure. By creatively expanding the definition of “force majeure,” a party might be able to indirectly foreclose the other party from recovering any damages. Most parties will agree that a “force majeure” should include acts of God such as hurricanes, earthquakes, flooding and fires, but one should also consider items as “strikes” (the customer might argue that the manufacturer has some control over its labor force and if the strike is particular to its facility, this should not be considered a force majeure item) and third party actions (e.g., the inability of a vendor to timely deliver materials to the manufacturer)

(h) Consider whether a customer must reduce its damages by the amount of any insurance recovery, third party recovery or tax benefit (e.g., and recover from the manufacturer only its “net damages.”

(i) Consider whether to include clause requiring a party to affirmatively mitigate its damages.

(j) Consider whether to agree to a shortened “contractual” statute of limitations for a party to present a claim for damages. This would likely foreclose a party from raising (in response to a proceeding initiated by the other party) claims which it failed to timely raise in accordance with the agreed-upon limitations period.

2. Cap on liability.

(a) Contracts should generally contain an “overall cap on liability” expressed as (i) a fixed dollar amount or (ii) a percentage or multiplier of the amounts paid by the customer during the preceding (12-month) period. (“Amounts paid” is often better than “trailing 12 month revenue” because it excluded disputed invoices). Often, it is necessary to craft a limitation that works in the beginning of the period (where there is no revenue) as well as years later. One can accomplish this in several ways, including by giving the customer a “greater/lesser” option of a fixed dollar amount or an “amount paid”.

(b) Subcaps can also be an effective way to limit certain types of damages. Assume that in the example in (1)(b) above, the parties agreed on an overall cap of the “greater of $2.5 million or five percent of the trailing twelve months revenue.” The parties anticipate that during the first year, the revenue would be approximately $50 million, but that it would increase to $100 million in the second year and $150 million in the third

year. Therefore, the effective cap during the first year would be $2.5 million, but this cap would rise to $7.5 million in the third year. Manufacturer might be willing to reimburse the customer for a certain amount of cover damages (e.g. $500 per unit, up to a maximum of $1,000,000), but does not want to expose itself to the full limitation of liability cap ($2.5 - $7.5 million). Similarly, Manufacturer might be willing to reimburse customer for a portion of any liquidated damages which the customer might have to pay its customer or a certain amount of product recall expenses. Subcaps can be particularly effective in these cases.

3. Exclusions from the Limitation of Liability Clause. It is fairly typical to exclude (i) indemnification obligations; (ii) breaches of confidentiality obligations; (iii) misappropriation of the other's intellectual property; (iv) payment obligations for product delivered and (v) in manufacturing agreements, liability for excess materials (see below) from the limitation of liability clause. Because they are typically excluded, it is critical that these clauses – and in particular the indemnification clause – be drafted precisely and narrowly.

4. Standard Limitation of Liability Clause:

IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER FOR ANY INDIRECT, CONSEQUENTIAL, INCIDENTIAL, PUNITIVE OR SPECIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, EVEN IF SUCH OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE LIMITATION SET FORTH IN THIS SECTION SHALL APPLY WHERE THE DAMAGES ARISE OUT OF OR RELATE TO THIS AGREEMENT. FOR THE PURPOSE OF THIS SECTION, BOTH LOST PROFITS AND DAMAGES RESULTING FROM VALUE ADDED TO THE PRODUCT BY CUSTOMER SHALL BE CONSIDERED CONSEQUENTIAL DAMAGES. IN NO EVENT SHALL MANUFACTURER'S LIABILITY FOR A PRODUCT (WHETHER ASSERTED AS A TORT CLAIM OR CONTRACT CLAIM) EXCEED THE AMOUNTS PAID TO MANUFACTURER. IN NO EVENT SHALL MANUFACTURER'S LIABILITY HEREUNDER EXCEED THE GREATER OF $1 MILLION OR 5% OF THE AMOUNTS ACTUALLY PAID BY CUSTOMER DURING THE 12-MONTH PERIOD PRECEDING THE EVENTS WHICH GAVE RISE TO THE CLAIM. IN NO EVENT WILL MANUFACTURER BE LIABLE FOR COSTS OF PROCUREMENT OF SUBSTITUTE GOODS BY CUSTOMER. THESE LIMITATIONS SHALL APPLY NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY. NOTWITHSTANDING THE FOREGOING, THIS SECTION SHALL NOT (I) AFFECT CUSTOMER'S OBLIGATION FOR TERMINATION PAYMENTS OR (II) LIMIT EITHER PARTY'S OBLIGATIONS UNDER [LIST THE CONFIDENTIALITY AND INDEMNITY SECTIONS].

B. Value Add Liability. Occasionally, a manufacturer must accept some level of "value add" liability. It is critical to limit one's exposure to a reasonable level. The manufacturer should consider limiting its liability:

(a) to a percentage of the revenue generated by the customer during the previous year/quarter;

(b) to the cost of the components damaged as a result of the breach of warranty, exclusive of markup (and exclusive of labor charges, lost profits, etc);

(c) to a certain lot size/number of units (the manufacturer wants to encourage its customers to halt manufacturing once they suspect a defect rather than continue

to populate potentially defective units in order to meet their customer's demands);

(d) to a certain dollar value of components per unit;

(e) to taking a credit on future orders rather than receiving a credit on prior orders (so that the manufacturer can mitigate the impact through future product sales).

C. Liquidated Damages (For Late Delivery). There are two schools of thoughts concerning the use of liquidated damages in the case of late delivery. The "business people" generally dislike liquidated damages because they provide an easy and obvious remedy for the customer for late deliveries which might not cause the customer any actual damage (and, accordingly, claims which the customer might not choose to otherwise pursue if it had to prove its damages). Business people may also think that a liquidated damages remedy might cause the parties to dwell on "pointing fingers" as to the cause of the late delivery in order to provide for/defend against the applicability of the liquidated damages clause which tends to distract the parties from their long-term relationship. Attorneys, however, often prefer the inclusion of a pre-negotiated measure of damages to the uncertainty of having a third party determine a party's damages. Where liquidated damages are the "sole remedy" for a delayed delivery, liquidated damages can be a very effective limitation of liability. The parties should consider the following when drafting a late-delivery damages clause:

(a) Consider limiting damages to cases where the customer has specifically advised the manufacturer that the order is subject to liquidated damages;

(b) Consider limiting damages to the lesser of the liquidated damages or the amounts actually paid to the customer's customers;

(c) Consider limiting damages to circumstances where the delay is caused solely by the manufacturer (e.g., not where the delay is attributable to the vendor's failure to timely deliver Components to the manufacturer);

(d) Damages should be limited to a certain percentage of the sales price (e.g., 1% for delays between 7-15 days, 2% for delays between 15-25 days and 3% for delays greater than 25 days)

(e) If the business is new to the manufacturer (e.g., customer had a prior supplier) determine what the current on time delivery ("OTD") rate is first, and use that as a benchmark (e.g., if the current OTD rate is 98%, the manufacturer should not be penalized if its OTD rate is 98.5%, even if it is not at 100%)

IV. Component Liability

A. In certain cases, the manufacturer will wait for an order before it expends any money to support the order. In many cases, however, the manufacturer will have to take action (e.g., order components) and incur liability prior to the date on which it receives an order. Many customers choose to provide forecasts to the manufacturer, and expect the manufacturer to be able to fully support its orders which have been included in the forecast (as well as some additional "drop in" orders as set forth in the flexibility parameters). Often the customer disclaims any liability for its forecast, and expects the manufacturer to take the risk that the forecast may not materialize. Where the manufacturer has many customers for its product (and the manufacturer's margins and/or industry standard/competition support taking the risk), the manufacturer may be willing to do so. However, where the customer is the manufacturer's sole customer for the product

or where the customer has specifically requested that the manufacturer customize its standard product to meet the customer's specification (which requires the manufacturer to purchase components which are not usable for any other customer), it is fair for the manufacturer to require the customer to remain liable for purchases made in support of the customer's forecast.

B. The "material liability" risk is best illustrated by example: Assume that on March 1, 2011, Manufacturer and Customer ABC sign an Agreement which forecasts delivery of 100 units on January 1, 2012 and an additional 100 per week for the remainder of the quarter, for a total of 1,300 units. ABC has several configurations for the product, and will only issue a purchase order 30 days prior to the delivery date of the product (but expects Manufacturer to be able to support is forecast by ordering the necessary components in accordance with the component vendor's required leadtime (the "Vendor Lead Time"). Under industry practice, Manufacturer will place Component orders such that all Components are received by Manufacturer on or before December 10, 2011 so that the Manufacturer can manufacture, test and ship the product in time for the January 1, 2012 deadline (the period between December 12, 2011 and January 1, 2012 is referred to as the "Manufacturing Lead Time"). Manufacturer must order the component within the Vendor Lead Time; if Manufacturer does not order the component within the Vendor Lead Time, it should expect to pay a premium for the component (if the component is even available). Certain components may have Vendor Lead Times in excess of 30 weeks. That means that, in order for Manufacturer to have the component "on hand" by December 12, 2011, it would have to order the component 30 weeks prior to that date (e.g., by May 30, 2011).

C. The manufacturer will want to be covered for components it orders based on the customer's then-current forecast (e.g., the forecast that drove the component purchases, even if subsequent forecasts show lower demand) within the Vendor Lead Times. Manufacturers recognize that it is impractical to order components on a daily basis. Typically, manufacturers define components into three levels:

"A" Components:	High dollar components that represent 80% of the material cost, but only approximately 3% of the components. For example, controllers or ASICs.
"B" Components	The 17% worth of components (following the "A" Components) representing approximately 17% of the material cost. For example: printed circuit cards or power supplies.
"C" Components	Low dollar components representing 3% of the material cost, but consisting of 80% of the part numbers. For example, resistors or capacitors.

D. Typically, a manufacturer will order "A" components every week, will order "B" components every month, and will order "C" components every quarter. For example, assume a product has only three Components – one "A" Component with a leadtime of 26 weeks; one "B" Component with a leadtime of 12 weeks, and one "C" Component with a leadtime of 39 weeks; (ii) the product contains one "A" Component, one "B" Component, and five "C" Components, and (iii) that our contract permits us to purchase two weeks' worth of "A" Components, four weeks' worth of "B" Components and thirteen weeks' worth of "C" Components.:

Class	Leadtime	Periods Worth Of Supply	Quantity Per
A	26 weeks	2 weeks	1
B	12 weeks	4 weeks	1
C	39 weeks	13 weeks	5

The "Quantity Per" line means the number of components used in each product; there are often several of the same "C" components (e.g., resistors) in each product. Manufacturer's MRP would require it to place an order for the "A" Components on June 12, 2011 (26 weeks prior to December 12, 2003). Under the example above, Manufacturer is covered for up to one weeks' worth of "A" Components, and the Manufacturer's buyer would place an order for 100 "A" Components. Manufacturer's MRP would require us to place an order for the "B" Components on September 8, 2011 (12 weeks prior to December 12, 2011). Under the example above, Manufacturer is covered for up to four weeks' worth of "B" Components, so the buyer would place an order for 400 "B" Components (likely requesting delivery of 100 on December 12, 2011, 100 on December 19, 2011, 100 on December 26, 2003 and 100 on January 2, 2012). Finally, Manufacturer's MRP would require it to place an order for the "C" Components on March 12, 2011 (39 weeks prior to December 12, 2011). Under the example above, Manufacturer is covered for up to thirteen weeks' worth of "A" Components, so the buyer would place an order for 6,500 "C" Components (since they are used "five-per product," Manufacturer would have to schedule delivery of 500 per week for each week of the quarter, subject to any lot and/or packaging sizes). In the example above, customer provides Manufacturer with a thirty day purchase order; accordingly, Manufacturer would not receive the purchase order for the units scheduled for delivery on January 1, 2012 until December 1, 2011. However, by December 1, 2011, Manufacturer would have already committed itself to purchase all components to fulfill the order. This explains why material coverage is so critical to manufacturing agreements.

E. Package Sizes/Minimum Order Quantities. Most suppliers have a minimum order requirement ("MOQ"). In addition, many components come in "reels" of 1,000 or 5,000, meaning that a manufacturer cannot simply order 1,500 of the component. In such cases, the manufacturer is required to meet the minimum order or packaging size even if all of the components will not be used based on the forecast. This creates "excess inventory" at the time of the order, and the agreement should contemplate this liability. Often a manufacturer will attempt to boost its profits by ordering "economic quantities" ("EOQ's") For example, if the cost for 1,000 pieces (the minimum) is $2.50 each, but the cost of 2,000 pieces is $2.00 each, Manufacturer might order 2,000 (even though the forecasted demand is only 1,000) to boost its profit. Customers will not generally approve these "EOQ" purchases unless they (rather than Manufacturer) reap the benefit.

F. Because forecasts change, the critical word is "<u>then-current</u>" forecast rather than the <u>current</u> forecast. In the above example, Manufacturer made Component purchases based on the March 1, 2011 forecast. If on August 31, the customer reduced its demand to 10 units per week (down from 100 units per week), Manufacturer would have enough Components "on order" to last for 6-12 months! At that point, Manufacturer should advise the customer of the customer's two options: (i) Manufacturer can attempt to cancel the now-excess Components "on order" (e.g., reduce the quantity of "C" items "on order" from 6,500 to 1,000 - assuming that this is consistent with the vendor's minimum lot size) and the customer can reimburse Manufacturer for any cancellation charges or (ii) Manufacturer can receive the Components and treat them as "excess" under the Agreement.

G. One should determine whether the customer's liability for components applies in the event customer terminates the underlying agreement for cause/breach. While one's initial view might be "no" (because of the breach), there is a strong basis for the component liability even if the manufacturer breaches the agreement. This is because, while the manufacturer might fail to deliver on one or more orders issued pursuant to the agreement (which might justify customer's cancellation of the order), it should not justify customer's refusal to pay for "long lead time components" ordered in support of the remainder of customer's forecast. Moreover, the presumption is that even if customer terminates the agreement and stops doing business with the manufacturer, it will still need someone (another manufacturer) to manufacture its product and, accordingly, the new manufacture can purchase the components from the current manufacturer. In the event the customer does not need the components (e.g., its new manufacturer doesn't require them), then the Components were "obsolete" anyway and, so long as they were ordered to the customer's forecast, the customer would be responsible for them anyway. Keep in mind that the material liability could be several million dollars! Note that customer is still free to pursue its actual direct damages as a result of the breach.

H. One should always ensure that there is a clearly defined time frame where the customer must purchase excess and/or obsolete components (e.g., quarterly, at the end of a product life). Otherwise, the manufacturer will be required to keep components far longer than it had intended.

V. Indemnity

A. An indemnity is a contract pursuant to which one party takes on the obligation to pay for any loss or damage that has been or might be incurred by another party. An indemnity creates a separate right of action by a party for claims covered by the indemnity. Because claims arising under the indemnity are typically excluded from the limitation of liability clause, it is critical that they be narrowly drafted.

B. Often, a party will take a "belt and suspenders" approach to an indemnity. For example, the party might require the other party to make several promises in the agreement, and then include a "covenant reinforcement" indemnity addressing these same promises. In virtually all cases, because the covenant will provide the party with a remedy, the indemnity is not needed. For example, if a manufacturer agrees to "return the customer's equipment in good working order, normal wear and tear excepted," there is no need for a separate indemnity covering the same item. In many contracts, one party often requests that the other party "indemnify it for all breaches of the agreement." One should never agree to this for several reasons. First, the parties have carefully negotiated remedies in the event of a breach of the agreement. Some of these remedies are limited. For example, the remedy for breach of warranty is often limited to repair, replacement or credit. The remedy for late delivery is sometimes limited to liquidated damages. Because the indemnity provides a separate remedy, an indemnity for "breach of the agreement' essentially nullifies the more limited remedies provided for under the warranty and late delivery sections of the agreement. Moreover, because the indemnity is generally excluded from (and not subject to) any limitations set forth in the limitation of liability section (e.g., a dollar cap or a limitation on the type of damages recoverable), an indemnity for "breach of contract" renders every other limitation in the contract meaningless.

C. In manufacturing, the manufacturer typically indemnifies the customer for third party claims (i) for personal injury or property damage arising out of its breach of the agreement or (ii) that the manufacturing process used to manufacture the product infringes any third party intellectual property right, and the customer typically indemnifies the manufacturer for third party claims (i) for personal injury or property damage arising

out of its breach of the agreement or (ii) that the product infringes any third party intellectual property right.

1. It is important to limit the indemnity to "third party claims"; otherwise, the indemnitee can use the indemnity to make a claim for their own damages (which claim is excluded from the limitation of liability). The limitation to "third party claims" becomes even more important when the scope of the indemnity expands.

2. It is important to limit the indemnity to "personal injury or property damage" (to property other than the product itself, which should be covered by the warranty). These types of claims are typically covered by insurance.

D. In design and manufacture contracts, the manufacturer is often asked to assume additional risk. The decision as to whether to indemnify for any design-related infringement (and any limitation to any such indemnification) should be carefully considered. Typically, any indemnification (and limits thereon) should be handled under a separate design agreement.

E. Another issue which might arise is "who bears the risk that a component infringes a third party's intellectual property." Where the manufacturer does not select the component, it should not be responsible for any warranty-defect or any claim that the component infringes a third party intellectual property right.

F. It is important to remember that an indemnity is only as good as the creditworthiness of the party making the indemnity.

VI. Effect of Nonstandard Terms on Pricing

A. Whereas certain risks are relatively easy to quantify (and, accordingly, easy to price into an agreement), others are difficult – if not impossible – to quantify.

B. Employees of the manufacturer should view the "customer purchase order" and the "contract" as one transaction. When the manufacturer quotes a certain product, it bases its quote on its standard terms and conditions. To the extent any of these standard terms are not reflected in the negotiated Agreement, the manufacturer must reevaluate the pricing to ensure that the deal still makes sense.

C. Consider the following example.

1. In response to an RFQ, (i) Manufacturer submits a quotation to the customer at a 10% gross margin; (ii) after taking into consideration the SGA attributable to the product (4%) and the operating expenses (interest and taxes of 2%), the expected profit margin is 4%; (iii) and the forecasted annual volume is $2.5 million. Under this example, Manufacturer would expect to make a profit of $100,000.

2. During contract negotiations, the customer advises Manufacturer that (i) it wants Manufacturer to pay liquidated damages (ranging from 1% to 5% of the product price) in the event the product is late, (ii) wants a 24-month warranty, (iii) wants Manufacturer to prepare all NAFTA certificates (iv) wants Manufacturer to be responsible for epidemic failures (but agrees to cap Manufacturer's liability at 5%), (v) wants Manufacturer to always carry two weeks of buffer stock, and (vi) wants net 60 day terms instead of the quoted "net 30" day terms.

3. In order to determine whether to accept the business, Manufacturer would need to evaluate the financial impact of each of these deviations from its standard terms. The analysis might go as follows:

   (a) Manufacturer believes that it is likely to have to pay 1.0% worth of liquidated damages. Expected annual cost: $25,000 (1.0% of $2.5 million annual revenue).

   (b) Manufacturer believes that the risk of going from a one year warranty to a two year warranty would increase its exposure by 0.5%. Expected annual cost: $12,500 (0.5% of $2.5 million).

   (c) In order to effectively manage the NAFTA certificates, Manufacturer would have to hire someone part-time (10 hours per week) at a cost of $12.50 per hour. Expected annual cost: $6,500 (10 x 52 x $12.50).

   (d) Manufacturer believes that the likelihood of an epidemic failure (for which it would be responsible) is minimal (5%), and the average cost of such a failure would be $1,500,000. However, Manufacturer was able to limit its liability for any epidemic failure to $500,000. Expected annual cost: $25,000 (5% of $500,000).

   (e) Based on the customer's forecast (level-loaded), Manufacturer would expect to ship nearly of $50,000 worth of finished product per week. In order to comply with the customer's buffer stock requirements, Manufacturer would have to maintain two weeks' worth of finished goods at all times (and, tie up $100,000 (2 x $50,000) worth of capital at all times). Expected cost (at a 12% cost of capital): $12,000 ($100,000 x 12%).

   (f) Manufacturer's credit department estimates the impact from moving from net 30 to net 60 day terms at 0.5% ($12,500).

4. Under these assumptions, the additional risk that Manufacturer is assuming (beyond the risk that we assume under our standard contract) is $93,500 ($25,000 + $12,500 + $6,500 + $25,000 + $12,000 + $12,500). Whether accepting an additional $93,500 risk (above the risk that Manufacturer knowingly assumes under its standard manufacturing agreement) to generate $100,000 makes business sense is a judgment call. At a minimum, these risks reduce the expected profit from $100,000 to $6,500. To increase its margins, Manufacturer might require that the customer either agree to its standard terms, or price the product higher in order to justify the additional risk. Moreover, the expected profit margin (originally 4% or $100,000, but now less than 0.5% or $6,500) assumes that the Manufacturer executes "perfectly" in accordance with its standard terms. If Manufacturer's buyer fails to timely order a component and Manufacturer is forced to expedite shipment (at its cost), the cost of the expedited shipment must also be deducted from the expected profit. Similarly, if Manufacturer experiences a warranty return rate or a scrap rate in excess of the assumption used in the quotation, that too must be deducted from the expected profit.

5. The foregoing example discussed only a fraction of the potential additional risks that a manufacturer might be asked to take. Other common risks a manufacturer might be asked to assume are (i) the risk of non-manufacturer provided components (when the manufacturer is asked to warrant components in addition to its workmanship), (ii) exchange rate risk (where there are limitations on

manufacturer's ability to adjust prices in the event of a change in exchange rates; (iii) shipping term risk (where the Incoterms are "DDP" rather than "EXW Manufacturer's facility"), (iv) the risk of holding inventory for a prolonged period of time/forecast fluctuations.