LOAN AND SECURITY AGREEMENT  
  
Dated as of November 14, 2008  
  
This Loan and Security Agreement (as modified from time to time, the '''Agreement'') has been executed by DYADIC INTERNATIONAL (USA), INC. (formerly known as Dyadic International, Inc.), a Florida corporation (“Dyadic Florida”), and DYADIC INTERNATIONAL, INC., a Delaware corporation (“Dyadic Delaware” and together with Dyadic Florida, the "Debtor"), as debtor, in favor of the XXXX X. XXXXXXXX TRUST, under agreement dated October 1, 1987, as amended (the “MAE Trust”), Francisco Trust, under agreement dated February 29, 1996, as amended, and Xxxx X. Xxxxxxxx, individually (“MAE”), collectively, as secured party (together with any successor, assign or subsequent holder, individually and collectively referred to as the "Secured Party"), with its main office c/o the MAE Trust at 000 Xxxxxxxx Xxxxx, Xxxxxxx, Xxxxxxx 00000. If more than one person or entity executes this Agreement, the term "Debtor" refers to each of them individually and some or all of them collectively, and their obligations hereunder shall be joint and several.  
  
Each Debtor is jointly and severally indebted to MAE Trust pursuant to the terms of that certain Revolving Note dated as of May 29, 2003, as amended, in the original principal amount of Three Million Dollars ($3,000,000) (the “Prior Note”). The Prior Note is secured by, among other things, a certain Security Agreement dated as of May 7, 2000, as amended, and a Security Agreement dated as of May 29, 2003, as amended (collectively, “Prior Security Agreement”), pursuant to which Dyadic Florida granted a security interest in and to certain personal property owned by Debtor as more particularly described in the Prior Security Agreement.  
  
Debtor acknowledges and agrees that (i) certain defaults exist under the Prior Note and Prior Security Agreement, (ii) Debtor has received proper notice and opportunities to cure such defaults under the terms of the Prior Note and Prior Security Agreement, and (iii) Debtor has failed to cure such defaults as of the date hereof.  
  
As of the date hereof, the outstanding principal balance of the Prior Note is Two Million Four Hundred Twenty-Four Thousand Two Hundred Ninety-Four and No/100 Dollars ($2,424,294.00), plus accrued and unpaid interest (such principal and accrued and unpaid interest being hereinafter referred to as the “Loan”).  
  
Notwithstanding the existence of such uncured defaults, until the first to occur of the maturity date specified in the Amended Note (as hereinafter defined) or the date upon which a Default (as hereinafter defined) shall occur, Secured Party has agreed to forbear on the exercise of its rights under the Prior Note and Prior Security Agreement in exchange for Debtor’s agreement to (i) execute and deliver that certain Amended and Restated Note dated as of even date herewith (the “Amended Note”) in the original principal amount of Two Million Four Hundred Twenty Four Thousand Two Hundred Ninety Four and No/100 Dollars ($2,424,294), and (ii) otherwise observe and comply with the terms and conditions set forth herein.  
  
  
   
NOW THEREFORE, in consideration of the foregoing recitals and other valuable consideration, the receipt and adequacy of which are hereby acknowledged, Debtor agrees as follows:  
  
1. DEFIN1TIONS. As used in this Agreement:  
  
(a) “Account”, “Account Debtor”, “Chattel Paper”, “Commercial Tort Claims”, “Deposit Accounts”, “Documents”, “Equipment”, “Fixtures”, “General Intangibles”, “Goods”, “Instruments”, “Inventory”, “Investment Property”, “Letter of Credit Rights”, “Proceeds” and “Tangible Chattel Paper” shall have the respective meanings assigned to such terms, as of the date of this Agreement, in the Uniform Commercial Code.  
  
(b) Capitalized terms not expressly defined herein shall have the meaning ascribed to such terms in the Amended Note.  
  
(c) “Collateral” shall mean the property of Debtor described in Section 2 hereof, together with all other personal property of Debtor now or hereafter pledged to Secured Party to secure, either directly or indirectly, repayment of the Secured Obligations.  
  
(d) “License Agreement” shall have the meaning set forth in Section 8 hereof.  
  
(e) “Loan Documents” shall mean all documents evidencing and securing Loan, including, without limitation, the documents described in Section 6.  
  
(f) “Secured Obligations” shall mean and include without limitation any and all of Debtor’s indebtedness, liabilities and other obligations to any Secured Party of every kind, nature and description, direct or indirect, joint or several, absolute or contingent, due or to become due, now existing or hereafter arising including, without limitation, the indebtedness and liabilities under the Amended Note, this Agreement and the other Loan Documents including, without limitation: (i) all obligations to perform acts or refrain from taking any action, (ii) each and all of the obligations of any Debtor owing to any Secured Party, whether now existing or hereafter arising, (iii) all indemnification and other obligations arising pursuant to any contract, agreement, or any bylaw of any Debtor or under applicable law, (iv) the damages due MAE by reason of claims asserted by him in that certain arbitration proceeding between Xxxx X. Xxxxxxxx, claimant, and Dyadic, Inc., respondent (American Arbitration Association # 32 460 00765 07), (iv) claims of MAE Trust and Francisco Trust relating to their conversion of indebtedness into shares of capital of Dyadic Florida or Dyadic Delaware, and (v) any other claim against any of Debtor.  
  
(g) “Uniform Commercial Code” shall mean the Uniform Commercial Code as adopted in the State of Florida, including all of its revisions, amendments and modifications that may occur during the term of this Agreement.  
  
2. SECURITY INTEREST. As security for the payment or other satisfaction of all Secured Obligations, Debtor hereby assigns to Secured Party and grants to Secured Party a continuing security interest in all of Debtor’s personal property, including, without limitation, the  
  
   
following property of Debtor, whether now or hereafter owned (in whole or in part), existing, acquired or arising and wherever now or hereafter located: (a) all Accounts and all Goods whose sale, lease or other disposition by Debtor has given rise to Accounts and have been returned to, or repossessed or stopped in transit by, Debtor; (b) all Chattel Paper, Instruments, Documents and General Intangibles (including, without limitation, all patents, patent applications, trademarks, trademark applications, tradenames, trade secrets, goodwill, copyrights, copyright applications, registrations, licenses, software, franchises, customer lists, tax refund claims, claims against carriers and shippers, guarantee claims, contract rights including, without limitation, leases and grants, payment intangibles, security interests, security deposits, rights to indemnification, strains and micro-organisms and related mutants and derivatives thereof now existing or hereafter produced, fermentation processes and protocols, proprietary and confidential information and materials, sequenced genome, annotated genome, genes, genetic material, research and development projects, research tools and materials, research equipment and supplies and know-how); (c) all Inventory including, without limitation, raw materials; (d) all Goods (other than Inventory) including, without limitation, Equipment, vehicles and Fixtures; (e) all Investment Property; (f) all Deposit Accounts, bank accounts, prepaid expenses and all deposits and cash; (g) all Letter of Credit Rights; (h) all Commercial Tort Claims, and all other claims and causes of action, whether in contract, tort or otherwise; (i) any property of Debtor now or hereafter in the possession, custody or control of Secured Party or any agent or any parent, affiliate or subsidiary of any of Secured Party or any participant with MAE Trust in the Loan, if any, for any purpose (whether for safekeeping, deposit, collection, custody, pledge, transmission or otherwise); (j) all other personal property described in the Prior Security Agreements; and (k) all additions and accessions to, substitutions for, and replacements, products and Proceeds of the foregoing property, including, without limitation, proceeds of all insurance policies insuring the foregoing property, and all of Debtor’s books and records relating to any of the foregoing and to Debtor’s business.  
  
3. SECURED OBLIGATIONS. The Collateral shall secure the payment and performance of each and all of the Secured Obligations. This Agreement shall continue and remain in effect notwithstanding that at any particular time there may be no Secured Obligations outstanding. Notwithstanding the foregoing, this Agreement shall terminate when Secured Party gives the Debtor written notice that the Secured Obligations and all amounts payable thereunder have been fully paid, and that all commitments and obligations of Secured Party with respect to the Secured Obligations have terminated.  
  
4. REPRESENTATIONS. Debtor hereby represents and warrants to Secured Party that:  
  
(a) Each Debtor is existing and in good standing under the laws of their state or other jurisdiction of formation, are duly qualified, in good standing and authorized to do business in each jurisdiction where failure to do so might have a material adverse impact on the consolidated assets, condition or prospects of Debtor; the execution, delivery and performance of this Agreement and all related documents and instruments are within Debtor's powers and have been authorized by all necessary corporate, action.  
  
(b) The execution, delivery and performance of this Agreement and all related documents and instruments have received any and all necessary governmental approval, and do  
  
   
not and will not contravene or conflict with any provision of law, charter or by-laws of any Debtor or any agreement affecting such Debtor or its property.  
  
(c) There has been no material adverse change in the business, condition, properties, assets, operations or prospects of Debtor since the date of the latest financial statements, if any, provided on behalf of Debtor to Secured Party.  
  
(d) No financing statement, mortgage, notice of judgment, or any similar instrument (other than those security interests in existence at the execution of the Loan Documents which have been disclosed to and approved by Secured Party) covering any of the Collateral is on file in any public office.  
  
(e) Debtor is the lawful owner of all Collateral, free and clear of all liens, pledges, charges, mortgages, and claims other than any in favor of Secured Party, except liens for current taxes not delinquent and those liens previously disclosed to Secured Party.  
  
(f) All Accounts and Inventory of Debtor are genuine, are in all respects what they purport to be, are not evidenced by a judgment, and represent undisputed, bona fide transactions completed or to be completed in accordance with the terms and conditions of any document related thereto; none of the Collateral has been sold or pledged to any other person or entity, except as previously disclosed to Secured Party; and each Debtor has no knowledge of any fact or circumstance which would impair the validity or collectability of any of the Collateral.  
  
(g) Debtor has filed or caused to be filed all federal, state, and local tax returns that are required to be filed, and has paid or has caused to be paid all of its taxes, including without limitation any taxes shown on such returns or on any assessment received by it, to the extent that such taxes have become due.  
  
5. COVENANTS OF DEBTOR. Debtor agrees that so long as this Agreement remains in effect, it will:  
  
(a) NOTIFY SECURED PARTY IN WRITING AT LEAST THIRTY (30) DAYS IN ADVANCE OF ANY CHANGE WHATSOEVER IN THE NAME OF DEBTOR OR THE NAME(S) UNDER WHICH DEBTOR CONDUCTS BUSINESS, ANY NEW NAMES UNDER WHICH DEBTOR INTENDS TO DO BUSINESS, AND ANY NEW ADDRESSES AT OR FROM WHICH DEBTOR INTENDS TO DO BUSINESS OR TO KEEP COLLATERAL OF ANY KIND;  
  
(b) provide and maintain insurance with respect to the Collateral, the operation of Debtor's business, and certain employees or officers of Debtor as required by Secured Party from time to time; all such insurance shall be in such amounts and against such risks as shall be satisfactory in all respects to Secured Party, with Secured Party named as additional insured and loss payee;  
  
(c) defend the Collateral against the claims and demands of all persons other than Secured Party and promptly pay all taxes, assessments, and charges upon the Collateral; and not  
  
   
sign (or permit to be signed), without the prior consent of Secured Party, any financing statements or other documents creating or perfecting a lien upon or security interest in any of the Collateral except in favor of Secured Party, or otherwise create, suffer, or permit to exist any liens or security interests upon any Collateral other than in favor of Secured Party, except tax liens, provided that such liens are removed before related taxes become delinquent;  
  
(d) execute such financing statements and other documents (and pay the cost of filing and recording the same in all public offices deemed necessary by Secured Party) and do such other acts as Secured Party may request to establish and maintain a valid and perfected security interest in the Collateral free and clear of all other liens and claims, except tax liens, provided that such liens are removed before related taxes become delinquent;  
  
(e) deliver to Secured Party any certificates or other documents of title representing or issued with respect to any of the Collateral, with Secured Party's security interest and lien endorsed thereon, and record such certificates or documents with all appropriate regulatory agencies;  
  
(f) furnish to Secured Party, immediately upon the request of Secured Party, any evidence of ownership of the Collateral, including without limitation bills of sale, paid invoices, certificates of title, or applications for title;  
  
(g) keep at its address for notices set forth under or opposite its signature hereto its records concerning the Collateral, which records shall be of such character as will enable Secured Party to determine at any time the status of the Collateral; furnish to Secured Party such information concerning Debtor, the Collateral, and the account debtors as Secured Party may from time to time reasonably request; and permit Secured Party from time to time, at reasonable times, to inspect the Collateral and to inspect, audit, and make copies of, and extracts from, all records and all other papers in the possession of Debtor pertaining to the Collateral and the account debtors; Secured Party shall have the right at any reasonable time or times to make direct verification with the account debtors of any and all of the accounts  
  
(h) keep and maintain the Collateral in good operating condition and repair, and make all necessary replacements and renewals to the Collateral so that the value and operating efficiency thereof shall at all times be maintained and preserved;  
  
(i) make appropriate entries upon its financial statements and its books and records disclosing Secured Party's security interest in the Collateral;  
  
(j) provide to Secured Party from time to time such financial statements of and other information concerning Debtor as Secured Party shall reasonably request;  
  
(k) if at any time any of the Collateral shall be or become evidenced by any instrument, note, or other document, immediately deliver such instrument, note, or document to Secured Party, endorsed as requested by Secured Party;  
  
   
(l) immediately notify Secured Party of any material loss or depreciation in the value of the Collateral;  
  
(m) not open any new deposit accounts without the prior written approval of Security Party;  
  
(n) not amend the License Agreement (as hereinafter defined) without the prior written approval of Secured Party; and  
  
(o) except if and to the extent specifically permitted by this Agreement, not sell, transfer, or otherwise dispose of any Collateral (other than a sale or disposition of any Inventory no longer useful in connection with the operation of Debtor's business, provided that prior to the sale or other disposition thereof such Inventory has been replaced by other Inventory of at least equal value and utility which is subject to the lien of this Agreement with the same priority as the Inventory so sold or disposed of, except for Dyadic Florida’s liquidation of Inventory without purchasing replacement Inventory from and after June 21, 2008 to the date of a Default under this Agreement) without Secured Party's prior written consent.  
  
6. DOCUMENTATION: Debtor agrees to deliver to Secured Party contemporaneously with the execution of this Agreement except as otherwise indicated, the following documents in form and substance acceptable to Secured Party:  
  
(a) Amended and Restated Note;  
  
(b) Collateral Assignment of Inventions and Patents and Patent Applications (“Collateral Patent Assignment”);  
  
(c) One or more blank assignments under the terms of the Collateral Patent Assignment;  
  
(d) Collateral Assignment of Trademarks (“Collateral Trademark Assignment”);  
  
(e) One or more blank assignments under the terms of the Collateral Trademark Assignment;  
  
(f) UCC Financing Statement regarding patents to be filed with the United States Patent and Trademark Office;  
  
(g) UCC Financing Statements for Debtor to be filed with the respective Secretaries of State of the states of formation of each Debtor;  
  
(h) all documentation required under applicable law to perfect and enforce same;  
  
(i) Control Agreement between Debtor, Secured Party and Citibank.  
  
   
Such documentation as necessary to reprice stock warrants to purchase to 1,500,000 shares of common stock of Dyadic Delaware (the “Common Stock”) issued to MAE Trust and other loan participants in connection with the Prior Note. The purchase price for such warrants shall be repriced to equal the price per share equal to the Average Closing Price for the Common Stock during the Trading Period (as hereinafter defined). For purposes of this paragraph, certain capitalized terms shall be defined as follows:  
  
“Trading Period” shall mean the period commencing November 12, 2008 and ending December 23, 2008. In the event the Common Stock shall cease to be publicly traded during such period, then the Trading Period shall sooner end on the last Trading Day during which the Common Stock was traded during such period.  
  
“Average Closing Price” shall mean the average of the closing prices for the Common Stock on each Trading Day during the Trading Period; provided, however, if on any Trading Day during the Trading Period, no shares of Common Stock are traded, then, for the purposes of such calculation, the closing price for such Trading Day shall be the average of the closing prices for the Trading Days preceding and following the day(s) during which no such trading occurred.  
  
 “Trading Day” shall mean a day in which the Common Stock is available to be publicly traded on the “Bulletin Board” or any recognized public exchange.”  
  
(j) Prior to December 15, 2008, a written agreement of Dyadic Nederland BV, a Dutch corporation, (“Dyadic BV”) pursuant to which Dyadic BV grants to Secured Party a legal, valid and binding lien, pledge, mortgage and security interest in any and all: equipment and other personal property owned by Dyadic BV, including, without limitation, all grants and other funding sources, patents, patent applications, trademarks, trademark applications, tradenames, trade secrets, goodwill, copyrights, copyright applications, registrations, licenses, software, franchises, customer lists, tax refund claims, claims against carriers and shippers, insurance claims, claims against board members, employees and officers, auditors and lawyers, and other professionals, guarantee claims, contract rights, payment intangibles, security interests, security deposits, rights to indemnification, strains and micro-organisms and related mutants and derivatives thereof now existing or hereafter produced, fermentation processes and protocols, proprietary and confidential information and materials, sequenced genome, annotated genome, genes, genetic material, research and development projects, research tools and materials, research equipment and supplies and know-how); all inventory; all goods (other than inventory), including, without limitation, equipment, vehicles and fixtures; all investment property; all deposits, accounts, bank accounts, prepaid expenses and all cash; all rights under letters of rights; all commercial tort and other claims; any property of Debtor or Dyadic BV now or hereafter in the possession, custody or control of Dyadic BV or any agent, if any, for any purpose (whether for safekeeping, deposit, collection, custody, pledge, transmission or otherwise); all other personal property of Dyadic BV; and all additions and accessions to, substitutions for, and replacements, products and proceeds of the foregoing property, including, without limitation,  
  
   
(k) proceeds of all insurance policies insuring the foregoing property, and all of Dyadic BV’s books and records relating to any of the foregoing and to its business;  
  
(l) Prior to December 15, 2008, agreements with any of the following to the extent desired by Secured Party to enable Secured Party to achieve as additional collateral security all property of Debtor and its subsidiaries, all in form and substance acceptable to Secured Party: (i) Bio-Technical Resources, of Manitowoc, Wisconsin, (ii) TNO, of the Netherlands, (iii) Ferm-Tech, Ltd of Moscow Russia, (iv) Polfa Tarchomin SA, of Warsaw, Poland SA, (v) Martek Biosciences Corporation, of Kingstree, South Carolina, (vi) Enmex, S.A. de C.V., of Tlalnepantla, Edo de Mexico, (vii) the owner of each facility in which research, development, production or processing is taking place on behalf of Debtor or any of its subsidiaries, (viii) each financial institution holding deposits or other assets of Debtor or any subsidiary of any of Debtor, and (ix) each landlord of any premises leased by any of Debtor, Dyadic BV or their respective subsidiaries.  
  
7. USE OF THE INVENTORY. Until notice to the contrary is given by Secured Party, Debtor may use, consume, and sell Inventory in carrying on its business in the ordinary course of business substantially in the same manner as now conducted, but a sale in the ordinary course of business shall not include any transfer or sale in satisfaction, partial or complete, of a debt owed by Debtor.  
  
8. CODEXIS LICENSE. Secured Party has consented to Debtor’s execution of a certain non-exclusive license to Codexis, Inc., a Delaware corporation (“Codexis”) for the use of certain patents and other property as more particularly described in that certain License Agreement dated on or about November 14, 2008 (the “License Agreement”). In connection therewith, MAE assigned and transferred certain patent rights to Dyadic Florida, and Secured Party entered into a certain Non-Disturbance Agreement by and among them, Debtor and Codexis, which among other things, permits Codexis certain rights to the use of the licensed property notwithstanding a Default by Debtor under the terms of the Amended Note or this Agreement. Debtor acknowledges that Secured Party’s consent to the restrictions on its exercise of the Collateral pursuant to the Non-Disturbance Agreement constitutes additional consideration for the Debtor’s performance of its obligations under the Amended Note and this Agreement.  
  
9. COLLECTIONS.  
  
(a) Until notice to the contrary is given by Secured Party, Debtor (i) shall collect the accounts for Secured Party at Debtor's own expense, and (ii) may grant, in the ordinary course of business, to any party obligated on any of the Collateral, any rebate, refund, or allowance to which such party may be lawfully entitled and accept in connection therewith the return of any goods the sale or lease of which shall have given rise to such accounts.  
  
(b) At any time and from time to time, whether before or after the occurrence of a Default, Secured Party, at Debtor's expense, may or, upon request of Secured Party, Debtor shall, notify any account debtors of the existence of this Agreement and direct such account debtors to pay directly to Secured Party the amounts due or to become due from such account debtors.  
  
   
Each account debtor so notified and directed may accept the receipt of Secured Party for any such payment as a full release of any amounts so paid.  
  
(c) Secured Party may enforce collection of any or all of the Collateral by suit or otherwise, and surrender, release, or exchange all or any part thereof, or compromise or extend or renew for any period (whether or not longer than the original period) any indebtedness thereunder.  
  
(d) Secured Party at any time may, and upon direction of Debtor or upon the happening of a Default shall, apply all payments received from account debtors to the Secured Obligations when due (whether by acceleration or otherwise) and may credit any balance after such payment to the account of Debtor.  
  
10. WARRANTY-FUTURE. The request or application by Debtor for any Secured Obligations secured hereby shall be a representation and warranty by Debtor as of the date of such request or application that: (i) no Default or Unmatured Event of Default (in each case as defined herein) has occurred or is continuing as of such date; and (ii) Debtor's representations and warranties herein are true and correct as of such date as though made on such date, except that Section 4(c) shall be deemed to refer to the then most recent financial statements furnished to Secured Party.  
  
11. EVENTS OF DEFAULT. The occurrence and continuation of any of the following described events shall constitute a "Default":  
  
(a) failure to pay, when and as due, any principal, interest or other amounts payable hereunder or in connection with any of the Secured Obligations, or failure to comply with or perform any agreement or covenant of Debtor contained herein, failure to pay when and as due, any principal, interest, or other amounts payable to Lender under any other notes executed and delivered to Lender by Borrower; or  
  
(b) any default, event of default, or similar event shall occur or continue beyond the expiration of any applicable notice and cure period under any Loan Document, or any such Loan Document shall not be, or shall cease to be, enforceable in accordance with its terms; or  
  
(c) there shall occur any default or event of default which shall continue beyond the expiration of any applicable notice and cure period, or any event or condition that might become such with notice or the passage of time or both, or any similar event, or any event that requires the prepayment of borrowed money or the acceleration of the maturity thereof, under the terms of any evidence of indebtedness or other agreement issued or assumed or entered into by Debtor, or under the terms of any indenture, agreement, or instrument under which any such evidence of indebtedness or other agreement is issued, assumed, secured, or guaranteed; or  
  
(d) any representation, warranty, schedule, certificate, financial statement, report, notice, or other writing furnished by or on behalf of Debtor to any Secured Party is false or misleading in any material respect on the date as of which the facts therein set forth are stated or certified; or  
  
   
  
(e) any guaranty of or pledge of collateral security for the Secured Obligations, including without limitation this Agreement, shall be repudiated or become unenforceable or incapable of performance; or  
  
(f) any of Debtor shall fail to maintain its existence in good standing in its state of formation or shall fail to be duly qualified, in good standing and authorized to do business in each jurisdiction where failure to do so might have a material adverse impact on the consolidated assets, condition or prospects of any of Debtor; or  
  
(g) any of Debtor shall dissolve, liquidate, merge, consolidate, or cease to be in existence for any reason; or  
  
(h) MAE, without his written consent, is not an employee of Dyadic Florida and Dyadic Delaware with at least the same level of compensation and benefits currently received by him; or  
  
(i) MAE, without his written consent, is not the chief executive officer of each of Dyadic Florida, Dyadic Delaware and Dyadic BV; or  
  
(j) MAE, without his written consent, is not a director of each of Dyadic Florida, Dyadic Delaware and Dyadic BV; or  
  
(k) any proceeding (judicial or administrative) shall be commenced against Debtor, or with respect to any assets of Debtor, which shall threaten to have a material and adverse effect on the assets, condition or prospects of Debtor and such proceeding shall not be discharged or dismissed within ten (10) days of Secured Party’s written notice thereof to Debtor; or final judgment(s) and/or settlement(s) shall be entered or agreed to in any suit or action commenced against Debtor; or  
  
(l) Debtor shall hereafter grant or any person (other than Secured Party) shall hereafter obtain a security interest in any of the Collateral, without Secured Party's written consent, or a court shall determine that Secured Party does not have valid perfected security interest in any of the Collateral enforceable in accordance with the terms hereof, or any notice of a federal tax lien against Debtor shall be filed with any public recorder which lien is not being contested in good faith; or  
  
(m) there shall be any material loss or depreciation in the value of any of the Collateral for any reason (other than Dyadic Florida’s liquidation of inventory from and after June 21, 2008 to the date of a Default under this Agreement without purchasing replacement inventory), or Secured Party shall otherwise reasonably deem itself insecure; or, unless expressly permitted by this Agreement or the related documents, all or any part of any of the Collateral or any direct, indirect, legal, equitable or beneficial interest therein is assigned, transferred or sold without Secured Party's prior written consent; or  
  
   
(n) any bankruptcy, insolvency, reorganization, arrangement, readjustment, liquidation, dissolution, or similar proceeding, domestic or foreign, is instituted by or against Debtor, or Debtor shall take any steps toward, or to authorize, such a proceeding; or  
  
(o) Debtor shall become insolvent, generally shall fail or be unable to pay its debts as they mature, shall admit in writing its inability to pay its debts as they mature, shall make a general assignment for the benefit of its creditors, shall enter into any composition or similar agreement, or shall suspend the transaction of all or a substantial portion of its usual business.  
  
Notwithstanding the foregoing, or anything contained herein or in any of the Loan Documents, Debtor's failure to pay all of the Secured Obligations on the Maturity Date shall constitute a Default, and Secured Party shall be under no obligation to provide any notice of the Maturity Date, or failure to pay, and Debtor shall have no right or opportunity to cure such Default.  
  
12. DEFAULT REMEDIES.  
  
(a) Notwithstanding any provision of any document or instrument evidencing or relating to any Secured Obligations, if Debtor is in Default under the terms of this Agreement, the Secured Obligations shall be immediately and automatically due and payable without action of any kind on the part of Secured Party. Upon the occurrence and during the continuance of any Default, Secured Party may exercise any rights and remedies under this Agreement, any related document or instrument (including without limitation any pertaining to Collateral), and at law or in equity.  
  
(b) If any Default shall have occurred and be continuing, then, in addition to having the right to exercise any rights and remedies of a secured party upon default under the Uniform Commercial Code in effect in the State where the main office of Secured Party and/or any Collateral is located, Secured Party may, in its sole discretion, exercise any rights or powers set forth in this Agreement. Upon request of Secured Party, Debtor shall promptly assemble the Collateral and deliver it to a place designated by Secured Party. Without limiting any other provision hereof, Debtor shall pay all related expenses, including, without limitation, Secured Party's attorneys' fees. If any notification of intended disposition of any of the Collateral is required by law, such notification, if mailed, shall be deemed reasonably and properly given if mailed at least ten days before such disposition, postage prepaid, addressed to Debtor at the address of Debtor shown below. Secured Party shall, in addition to and not in limitation of all rights of offset under applicable law, have the right to appropriate and apply all of the Collateral in its possession to payment of the Secured Obligations. Secured Party may proceed to sell or otherwise dispose of the Collateral at public or private sale for cash or credit; provided, however, that Debtor shall be credited with proceeds of such sale only when the proceeds are actually received by Secured Party. Secured Party may apply any proceeds of the Collateral to the payment of expenses and costs to exercise of Secured Party's rights hereunder, and any balance of such proceeds shall be applied toward the Secured Obligations in such order as Secured Party shall determine in its sole discretion. Any balance remaining shall be returned to Debtor.  
  
   
(c) Secured Party may, by written notice to Debtor, at any time and from time to time, waive any Default or "Unmatured Event of Default" (as defined below), which shall be for such period and subject to such conditions as shall be specified in any such notice. In the case of any such waiver, Secured Party and Debtor shall be restored to their former position and rights hereunder, and any Default or Unmatured Event of Default so waived shall be deemed to be cured and not continuing; but no such waiver shall extend to or impair any subsequent or other Default or Unmatured Event of Default. No failure to exercise, and no delay in exercising, on the part of Secured Party of any right, power or privilege hereunder shall preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The rights and remedies of Secured Party herein provided are cumulative and not exclusive of any rights or remedies provided by law. "Unmatured Event of Default" means any event or condition which might become a Default with if continuing after notice or the passage of time or both.  
  
13. RIGHTS OF SECURED PARTY. Secured Party may, from time to time, at its option (but shall have no duty to):  
  
(a) perform any agreement of Debtor hereunder that Debtor shall have failed to perform  
  
(b) take any other reasonable action which Secured Party deems necessary or desirable for the preservation of the Collateral or Secured Party's interest therein and the carrying out of this Agreement or any of the other Loan Documents, including without limiting the generality of the foregoing: (i) any action to collect or realize upon the Collateral; (ii) the discharge of taxes, liens, security interests or other encumbrances at any time levied or placed on the Collateral; (iii) the discharge or keeping current of any obligation of Debtor having effect on the Collateral; or (iv) receiving, endorsing and collecting all checks and other orders for the payment of money made payable to Debtor representing any dividend, interest payment or other distribution payable or distributable in respect of the Collateral or any part thereof, and to give full discharge for the same; and  
  
(c) file, or cause to be filed, photocopies or carbon copies of any financing statement or other Loan Document respecting any right of Secured Party in the Collateral, and any such photocopy or carbon copy of the signature of Debtor on such photocopy or carbon copy shall be deemed an original for purposes of such filing. Debtor hereby authorizes Secured Party to sign financing statements on Debtor's behalf to be filed in all jurisdictions in which such authorization is permitted.  
  
Debtor hereby appoints Secured Party as Debtor's attorney in fact, which appointment is and shall be deemed to be irrevocable and coupled with an interest, for purposes of performing acts and signing and delivering any agreement, document, or instrument, on behalf of Debtor in accordance with this Section. Debtor will, on demand, reimburse Secured Party for all reasonable expenses so incurred by Secured Party. In the event Debtor fails to reimburse Secured Party on demand, the amount of such expenses shall accrue interest thereon at the rate of fourteen percent (14%).  
  
   
14. FURTHER ASSURANCES. Debtor agrees to do such further acts and things, and to execute and deliver such additional conveyances, assignments, agreements, and instruments, as Secured Party may at any time request in connection with the administration or enforcement of this Agreement or related to the Collateral or any part thereof or in order better to assure and confirm unto Secured Party its rights, powers and remedies hereunder, including without limitation, delivery of possession to Secured Party of any certificates or other collateral which may be perfected solely by means of possession by a secured party under the Uniform Commercial Code.  
  
15. OBLIGATIONS UNCONDITIONAL; WAIVER OF DEFENSES. Debtor irrevocably agrees that no fact or circumstance whatsoever which might at law or in equity constitute a discharge or release of, or defense to the obligations of, a guarantor or surety shall limit or affect any obligations of Debtor under this Agreement or any document or instrument executed in connection herewith. Without limiting the generality of the foregoing:  
  
(a) Secured Party may at any time and from time to time, without notice to Debtor, take any or all of the following actions without affecting or impairing the liability of Debtor on this Agreement:  
  
(i) renew or extend time of payment of the Secured Obligations;  
  
(ii) accept, substitute, release or surrender any security for the Secured Obligations; and  
  
(iii) release any person primarily or secondarily liable on the Secured Obligations (including without limitation any indorser, and any guarantor)  
  
(b) No delay in enforcing payment of the Secured Obligations, nor any amendment, waiver, change, or modification of any terms of any document or instrument which evidences or is given in connection with the Secured Obligations, shall release Debtor from any obligation hereunder. The obligations of Debtor under this Agreement are and shall be primary, continuing, unconditional and absolute (notwithstanding that at any time or from time to time all of the Secured Obligations may have been paid in full), irrespective of the value, genuineness, regularity, validity or enforceability of any documents or instruments respecting or evidencing the Secured Obligations. In order to hold Debtor liable or exercise rights or remedies hereunder, there shall be no obligation on the part of Secured Party, at any time, to resort for payment to any guarantor or to any other security for the Secured Obligations. Secured Party shall have the right to enforce this Agreement as against any one or all of Debtor and irrespective of whether or not other proceedings or steps are being taken against any other property securing the Secured Obligations or any other party primarily or secondarily liable on any of the Secured Obligations.  
  
(c) Expect as otherwise provided in any note, agreement, instrument or document evidencing the Secured Obligations, Debtor irrevocably waives presentment, protest, demand, notice of dishonor or default, notice of acceptance of this Agreement, notice of any loans made, extensions granted or other action taken in reliance hereon, and all demands and notices of any kind in connection with this Agreement or the Secured Obligations.  
  
   
  
(d) While this Agreement remains in full force and effect, Debtor waives any claim or other right which Debtor might now have or hereafter acquire against any other person primarily or contingently liable on the Secured Obligations (including without limitation any maker, indorser or guarantor) or that arises from the existence or performance of Debtor's obligations under this Agreement, including without limitation any right of subrogation, reimbursement, exoneration, contribution, indemnification, or participation in any claim or remedy of Secured Party against Debtor or any other person primarily or contingently liable on the Secured Obligations (including without limitation any maker, indorser or guarantor) or any other collateral security for the Secured Obligations, which Secured Party now has or hereafter acquires, however arising.  
  
16. NOTICES. All notices, requests and demands to or upon the respective parties hereto shall be deemed to have been given or made when deposited in the mail, postage prepaid, addressed if to Secured Party to its main office indicated above, and if to Debtor to its address set forth below, or to such other address as may be hereafter designated in writing by the respective parties hereto or, as to Debtor, may appear in Secured Party's records.  
  
17. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be an original, and by the parties on separate counterparts which, taken together, shall constitute one and the same instrument. Any signed counterpart delivered by facsimile or email "pdf" shall be effective as a signed counterpart. Upon request of any party, facsimile signature or email "pdf", shall be replaced with an original signature as promptly as practicable.  
   
18. MISCELLANEOUS. This Agreement and any document or instrument executed in connection herewith shall be governed by and construed in accordance with the internal laws of the State of Florida. Unless the context requires otherwise, wherever used herein the singular shall include the plural and vice versa, and the use of one gender shall also denote the other. Captions herein are for convenience of reference only and shall not define or limit any of the terms or provisions hereof; references herein to Sections or provisions without reference to the document in which they are contained are references to this Agreement. This Agreement shall bind Debtor, its heirs, trustees (including without limitation successor and replacement trustees), executors, personal representatives, successors and assigns, and shall inure to the benefit of Secured Party, its successors and assigns, except that Debtor may not transfer or assign any of its rights or interest hereunder without the prior written consent of Secured Party. Debtor agrees to pay upon written demand all reasonable expenses (including without limitation attorneys' fees, legal costs and expenses, whether in or out of court, in original or appellate proceedings or in bankruptcy) incurred or paid by Secured Party or any holder hereof in connection with the enforcement or preservation of its rights hereunder or under any document or instrument executed in connection herewith. If there shall be more than one person or entity constituting Debtor, each of them shall be primarily, jointly and severally liable for all covenants and obligations hereunder. Each representation and warranty of Debtor herein shall be deemed to be jointly made by each Debtor hereunder.  
  
  
   
IN WITNESS WHEREOF, the undersigned have caused this Loan and Security Agreement to be executed and delivered as of the 14th day of November, 2008.  
  
DYADIC INTERNATIONAL (USA), INC., a Florida corporation  
  
  
By: /s/ Xxxx X. Xxxxxxxxx  
Name: Xxxx X. Xxxxxxxxx  
Title: Interim CFO  
  
  
Address of Debtor for Notices: DYADIC INTERNATIONAL, INC., a  
000 Xxxxxxxxxxx Xxxxxx Xxxxx Xxxxxxxx corporation  
Xxxxx 000  
Xxxxxxx, Xxxxxxx 00000  
By: /s/ Xxxx X. Xxxxxxxxx  
Name: Xxxx X. Xxxxxxxxx  
Title: Interim CFO  
  
SECURED PARTY:  
  
  
FRANCISCO TRUST, under agreement dated February 28, 1996  
  
  
By: /s/ Xxxxxx Xxxxxxxxxx  
Xxxxxx Xxxxxxxxxx, Trustee  
Address of Secured Party  
For Notices: /s/ Xxxx X. Xxxxxxxx  
000 Xxxxxxxx Xxxxx Xxxx X. Xxxxxxxx, Individually  
Xxxxxxx, Xxxxxxx 00000  
THE XXXX X. XXXXXXXX  
TRUST under Agreement dated  
October 1, 1987, as amended  
  
  
By: /s/ Xxxx X. Xxxxxxxx, trustee  
Xxxx X. Xxxxxxxx, Trustee