AMENDED AND RESTATED  
  
 PLEDGE AGREEMENT  
  
 For good and valuable consideration and intending to be legally bound,  
XXXXXXX X. XXXXX ("Pledgor") hereby assigns, pledges and grants to OAO  
TECHNOLOGY SOLUTIONS, INC. a Delaware corporation ("Lender"), a security  
interest in the shares of capital stock and/or other securities of Lender, now  
owned by or standing in the name of Pledgor or in which Pledgor has a legal or  
beneficial interest, which are described on Schedule A attached hereto and made  
a part hereof (collectively, the "Securities"), together with all (a) additional  
property issued by Borrower from time to time acquired by Pledgor in any manner,  
and the certificates or instruments representing such additional property, and  
all dividends, interest, cash, instruments, and other property from time to time  
received, receivable, or otherwise distributed or distributable in respect of or  
in exchange for any or all of such additional property; and (b) cash and  
non-cash proceeds, distributions, additions, substitutions, exchanges,  
redemptions and replacements of, on or by reason of any of the foregoing  
(collectively, the "Collateral"), as security for the payment and performance of  
all indebtedness, liabilities and obligations of Borrower (primary, secondary,  
direct, contingent, related, unrelated, sole, joint or several) to Lender,  
whether for principal, interest, fees, expenses or otherwise, (the  
"Obligations"), arising under that certain promissory note, dated of even date  
herewith, issued by Borrower in the principal amount of $2,932,500 (the "Note"),  
all on the following terms and conditions.  
  
 A. Representations and Warranties. Pledgor represents and warrants that:  
  
 1. Pledgor has good title to the Securities free and clear of all  
 liens and encumbrances except the security interest created hereby.  
  
 2. Pledgor has delivered to Lender all stock certificates representing  
 or evidencing the Securities, accompanied by corresponding assignment or  
 transfer powers duly executed in blank by Pledgor, and this Pledge  
 Agreement and such powers have been duly and validly executed and are  
 binding and enforceable against Pledgor in accordance with their terms; and  
 the pledge of the Securities in accordance with the terms hereof creates a  
 valid and perfected first priority security interest in the Securities  
 securing payment of the Obligations.  
  
 3. No authorization, approval, consent, or other action by, and no  
 notice to or filing with, any governmental authority, regulatory body or  
 other person or entity is required either (i) for the pledge by Pledgor of  
 the Collateral pursuant to this Pledge Agreement or for the execution,  
 delivery or performance of this Pledge Agreement by Pledgor, or (ii) for  
 the exercise by Lender of the voting or other rights provided for in this  
 Pledge Agreement or the remedies in respect of the Collateral pursuant to  
 this Pledge Agreement (except as may be required in connection with such  
 disposition by laws affecting the offering and sale of securities  
 generally).  
  
 B. Negative Pledge. Pledgor agrees not to (i) sell or otherwise dispose of,  
or grant any option with respect to, any of the Collateral, or (ii) create or  
permit to exist any lien, security interest or other charge or encumbrance upon  
or with respect to any of the Collateral, except the security interest under  
this Pledge Agreement.  
  
 C. Additional Collateral. Prior to the full payment and performance of the  
Obligations, Pledgor shall pledge hereunder, as additional Collateral, and shall  
forthwith transfer and deliver to Lender immediately upon acquisition (directly  
or indirectly) thereof, any and all additional shares of stock or other  
securities of Borrower and any other property of any kind received, receivable,  
or otherwise distributed or distributable on or by reason of the Collateral,  
whether in the form of or by way of stock dividends, warrants, partial  
liquidation, conversion, prepayments or redemptions (in whole or in part),  
liquidation or otherwise with the sole exception of normal, regularly declared  
cash dividends or cash interest payments (as the case may be) paid in respect of  
the Collateral.  
  
 D. Pledgor's Rights in the Pledged Collateral Before Default. So long as no  
Event of Default (as such term is defined in the Note) shall have occurred and  
be continuing and Pledgor is in full compliance with the terms hereof:  
  
 1. Pledgor shall be entitled to receive and retain any normal,  
 regularly declared cash dividends or cash interest payments (as the case  
 may be) paid in respect of the Collateral, if such dividends and payments  
 are permitted under the Loan Documents.  
  
  
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 2. Pledgor may exercise all voting rights, if any, pertaining to the  
 Collateral for any purpose not inconsistent with the terms hereof or of the  
 Obligations or Loan Documents. In the event any Collateral has been  
 transferred into the name of Lender or a nominee or nominees of Lender  
 prior to the occurrence of such Event of Default, Lender or its nominee  
 shall execute and deliver upon request of Pledgor an appropriate proxy in  
 order to permit Pledgor to vote, if applicable, the same.  
  
 E. Further Assurances. Pledgor shall from time to time promptly take all  
actions (and execute, deliver and record all instruments and documents)  
necessary or appropriate or requested by Lender, to continue the validity,  
enforceability and perfected status of the pledge of the Collateral hereunder or  
to enable Lender to exercise and enforce the rights and remedies hereunder with  
respect to any of the Pledged Collateral.  
  
 F. Lender's Duties Toward Collateral. Lender shall be under no obligation  
to take any actions and shall have no liability (except for gross negligence or  
willful misconduct) with respect to the preservation or protection of the  
Collateral or any underlying interests represented thereby as against any prior  
or other parties. In the event Pledgor requests that Lender take or omit to take  
action(s) with respect to the Collateral, Lender may refuse so to do with  
impunity if Pledgor does not, upon request of Lender, post sufficient,  
creditworthy indemnities with Lender which, in Lender's sole discretion, are  
sufficient to hold it harmless from any possible liability of any kind in  
connection therewith.  
  
 G. Waivers by Pledgor. Pledgor agrees that Lender, at any time and without  
affecting its rights in the Collateral and without notice to Pledgor, may grant  
any extensions, releases or other modifications of any kind respecting the Loan  
Documents, the Obligations and any Collateral. Pledgor, except as otherwise  
provided herein or in the Loan Documents, waives all notices of any kind in  
connection with the Obligations, the Loan Documents and any changes therein or  
defaults or enforcements proceedings thereunder, whether against Pledgor or any  
other party. Pledgor hereby waives any rights it has at equity or in law to  
require Lender to apply any rights of marshalling or other equitable doctrines  
in such circumstances.  
  
 H. Remedies Upon Default. After the occurrence of any Event of Default (as  
defined in the Loan Documents) or if any representation, warranty or agreement  
of Pledgor hereunder is breached or proves to be false, erroneous or misleading  
in any material respect:  
  
 1. Lender may transfer or cause to be transferred any of the  
 Collateral into its own or a nominee's or nominees' names.  
  
 2. Lender shall be entitled to receive and apply in payment of the  
 Obligations any cash dividends, interest or other payment on the  
 Collateral.  
  
 3. Lender shall be entitled to exercise in Lender's discretion all  
 voting rights, if any, pertaining to the Collateral, and in connection  
 therewith and at the written request of Lender, Pledgor shall promptly  
 execute any appropriate dividend, payment or brokerage orders or proxies.  
  
 4. Pledgor shall promptly take any action necessary or required or  
 requested by Lender, in order to allow Lender fully to enforce the pledge  
 of the Collateral hereunder and realize thereon to the fullest possible  
 extent including, but not limited to, the filing of any claims with any  
 court, liquidator or trustee, custodian, receiver or other like person or  
 party.  
  
 5. Lender shall have all the rights and remedies granted or available  
 to it hereunder, under the Uniform Commercial Code as in effect from time  
 to time in Delaware, under any other statute or the common law, or under  
 any of the Loan Documents, including without limitation the right to sell  
 the Collateral or any portion thereof at one or more public or private  
 sales upon ten (10) days' written notice and to bid thereat or purchase any  
 part or all thereof in its own or a nominee's or nominees' names, free and  
 clear of any equity of redemption; and to apply the net proceeds of the  
 sale, after deduction for any expenses of sale, including without  
 limitation the payment of all Lender's reasonable attorneys' fees in  
 connection with the Obligations and the sale, to the payment of the  
 Obligations in any manner or order which Lender in its sole discretion may  
 elect, without further notice to or consent of Pledgor and without regard  
 to any equitable principles of marshalling or other like equitable  
 doctrines.  
  
  
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 6. Lender may increase, in its sole discretion, but shall not be  
 required to do so, the Obligations by making additional advances or  
 incurring expenses for the account of Pledgor deemed appropriate or  
 desirable by Lender in order to protect, enhance, preserve or otherwise  
 further the sale or disposition of the Collateral or any other property it  
 holds as security for the Obligations.  
  
 I. Dispositions of Collateral. Pledgor recognizes that Lender may be unable  
to effect a sale to the public of all or part of the Collateral by reason of  
certain prohibitions or restrictions in the federal or state securities laws and  
regulations (collectively, the "Securities Laws"), or the provisions of other  
federal and state laws, regulations or rulings, but may be compelled to resort  
to one or more private sales to a restricted group of purchasers who will be  
required to agree to acquire the Collateral for their own account, for  
investment and not with a view to the further distribution or resale thereof  
without restriction. Pledgor agrees that any sales(s) so made may be at prices  
and on other terms less favorable to Pledgor than if the Collateral was sold to  
the public, and that Lender has no obligation to delay sale of the Collateral  
for period(s) of time necessary to permit the issuer thereof to register the  
Collateral for sale to the public under any of the Securities Laws. Pledgor  
agrees that negotiated sales whether for cash or credit made under the foregoing  
circumstances shall not be deemed for that reason not to have been made in a  
commercially reasonable manner. Pledgor shall cooperate with Lender and shall  
satisfy any requirements under the Securities Laws applicable to the sale or  
transfer of the Collateral by Lender.  
  
 In connection with any sale or disposition of the Collateral, Lender is  
authorized to comply with any limitation or restriction as it may be advised by  
its counsel is necessary or desirable in order to avoid any violation of  
applicable law or to obtain any required approval of the purchaser(s) by any  
governmental regulatory body or officer and it is agreed that such compliance  
shall not result in such sale being considered not to have been made in a  
commercially reasonable manner nor shall Lender be liable or accountable by  
reason of the fact that the proceeds obtained at such sale(s) are less than  
might otherwise have been obtained.  
  
 Lender may elect to obtain the advice of any independent nationally-known  
investment banking firm, which is a member firm of the New York Stock Exchange,  
with respect to the method and manner of sale or other disposition of any of the  
Collateral, the best price reasonably obtainable therefor, the consideration of  
cash and/or credit terms, or any other details concerning such sale or  
disposition. Lender, in its sole discretion, may elect to sell on such credit  
terms which it deems reasonable.  
  
 J. Lender's Expenses. Pledgor shall pay Lender on demand all costs and  
expenses incurred by Lender (including, without limitation, counsel fees and  
expenses) in connection with (i) the preparation, negotiation, and closing of  
this Pledge Agreement, and any modifications hereto, (ii) the custody,  
preservation, sale or collection or realization of the Collateral, and (iii) the  
exercise or enforcement of Lender's rights hereunder.  
  
 K. Successors and Assigns. This Pledge Agreement shall be binding upon and  
shall inure to the benefit of the parties hereto and their respective heirs,  
personal representatives, successors and assigns and shall be governed as to its  
validity, interpretation and effect by the laws of the State of Delaware; and  
any terms used herein which are defined in the Uniform Commercial Code as  
enacted in Delaware shall have the meanings therein set forth.  
  
 L. Amendments and Waivers. No amendment or waiver of any provision of this  
Agreement nor consent to any departure by Pledgor herefrom shall in any event be  
effective unless the same shall be in writing and signed by Lender, and then  
such amendment, waiver or consent shall be effective only in the specific  
instance and for the specific purpose for which given. No failure or delay on  
the part of Lender in the exercise of any right, power, or remedy under this  
Pledge Agreement or any of the Loan Documents shall under any circumstances  
constitute or be deemed to be a waiver thereof, or prevent the exercise thereof  
in that or any other instance.  
  
 M. Attorney-in-Fact. Pledgor hereby irrevocably appoints Lender as its  
attorney-in-fact, in the name of Pledgor or otherwise, from time to time in  
Lender's discretion and at Pledgor's expense, to take any action and to execute,  
deliver and record any instruments or documents in connection with the  
Collateral which Lender may deem necessary or advisable to accomplish the  
purposes of this Pledge Agreement including, without limitation, to receive,  
endorse, and collect all instruments made payable to Pledgor representing any  
dividend, interest, or other distribution in respect of the Pledged Collateral  
or any part thereof and to give full discharge for the same. Lender shall not,  
in its capacity as such attorney-in-fact, be liable for any acts or omissions,  
nor for any error of judgment or mistake of fact or law, but only for gross  
negligence or willful misconduct.  
  
  
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 N. Entire Agreement. This Pledge Agreement, and all agreements and  
instruments to be delivered by the parties pursuant hereto or in connection  
herewith, represent the entire understanding of the parties with respect to the  
subject matter hereof. Except as otherwise indicated, all agreements defined  
herein refer to the same as from time to time amended or supplemented or the  
terms thereof waived or modified in accordance herewith and therewith. Any  
provision hereof found to be illegal, invalid or unenforceable for any reason  
whatsoever shall not affect the legality, validity or enforceability of the  
remainder hereof.  
  
 P. Joint and Several Obligations. If more than one Pledgor signs this  
Pledge Agreement, all references herein to Pledgor shall include all such  
Pledgors and each shall be jointly and severally bound by the terms and  
provisions hereof.  
  
 Q. Notices. All notices, demands or other communications required or  
permitted hereunder shall be in writing and shall be given as provided in the  
Note, using Pledgor's address as indicated below.  
  
 R. Partial Releases; Termination. Any of the Collateral may be released  
from this Pledge Agreement without altering, varying, or diminishing in any way  
this Pledge Agreement or the security interest granted hereby as to the  
Collateral not expressly released, and this Pledge Agreement and such security  
interest shall continue in full force and effect as to all of the Collateral not  
expressly released. This Pledge Agreement and Lender's rights in the Collateral  
shall cease, terminate and be void upon the repayment in full of the  
Obligations. Upon such repayment and termination, Lender shall execute such  
documents as may reasonably be required by Pledgor to release Lender's security  
interest in the Collateral.  
  
 S. Amended and Restated.This Pledge Agreement has been amended and restated  
to accurately reflect the agreement between the Pledgor and Lender as approved  
by the Board of Directors of the Lender.  
  
 IN WITNESS WHEREOF, Pledgor has executed this Pledge Agreement as of the  
14th day of July 1999.  
  
  
WITNESS OR ATTEST: PLEDGOR:  
  
  
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 Name: Xxxxxxx X. Xxxxx  
  
  
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 Schedule A  
  
 Description of Pledged Securities  
  
  
  
--------------------------------------------------------------------------------------------------------------  
 Stock Certificate No. of Shares Percentage of Issued  
 Issuer Class of Stock No. Shares  
--------------------------------------------------------------------------------------------------------------  
   
OAO Technology Common Stock 750,000 5%  
Solutions, Inc.  
--------------------------------------------------------------------------------------------------------------  
  
  
  
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