RECO	863642 SO - 1998 So
I. Name of conveying party(ies):     Christopher I. Byrnes     Additional name(s) of conveying party(ies) attached:YesxNo     Additional name(s) of conveying party(ies) attached:YesNo     Additional name(s) of conveying party(ies) attached:Yes     Additional name(s) of conv	2. Name and address of receiving party(ies): Name: Washington University Internal Address: One Brookings Drive St. Louis, Missouri 63130 Street Address: One Brookings Drive City <u>St. Louis</u> State: <u>MO</u> Zip: <u>63130</u> Additional name(s) & address(es) attached? <u>Yes x</u> No
5. Name and address of party to whom correspondence	
concerning document should be mailed: Name: R. Haferkamp Internal Address: 7733 Forsyth Boulevard, Suite 1400 Street Address: 7733 Forsyth Boulevard, Suite 1400 City: <u>St. Louis</u> State: <u>MO</u> ZIP: <u>63105</u>	<ul> <li>7. Total fee (37 CFR 3.41)\$ 40.00</li> <li><u>x</u> Enclosed</li> <li><u>X</u> Authorized to be charged to deposit account (if amount is insufficient)</li> </ul>
0/29/1998 DHGUYEN 00000310 09176984 FC:581 DO NOT US	8. Deposit account number: 18-1829 (Attach duplicate copy of this page if paying by deposit account) E THIS SPACE
9. Statement and Signature.         To the best of my knowledge and belief, the foregoing information is true and         R. Haferkamp         Name of person signing         OMB No. 0651-0011 (exp. 4/94)	correct and any attached copy is a true copy of the original document. Date Total number of pages including cover sheet, attachments, and document: <u>3</u>

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PATENT REEL: 9539 FRAME: 0653

## PATENT

## ASSIGNMENT

WHEREAS, I, Christopher I. Byrnes of 30 Aberdeen Place, St. Louis, Missouri 63105, have co-invented certain new and useful improvements in *Method And Apparatus For A Tunable High-Resolution Spectral Estimator* for which I have this same day executed an application for Letters Patent in the United States identifying me as a co-inventor thereof (said application being identified as Howell & Haferkamp, L.C., Docket 3047-6228); and

WHEREAS, Washington University, a corporation of the State of Missouri having its principal office and place of business at One Brookings Drive, St. Louis, Missouri 63130, is desirous of acquiring the entire right, title and interest in and to said invention and improvements as disclosed in said application, in and to said application, and in and to the patent to be obtained thereon.

NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable consideration, the receipt and adequacy of all of which are hereby acknowledged, I, Christopher I. Byrnes, have sold, assigned and transferred and do hereby sell, assign and transfer unto said Washington University, its successors or assigns, the entire right, title and interest in and to said invention and improvements as the same are disclosed in said application which was executed by me concurrently herewith preparatory to filing for Letters Patent, in and to said application, and in and to any Letters Patent, including divisionals, continuations, reissues, reexaminations and extensions to be obtained therefor in the United States and all foreign countries; and I further agree to cooperate with the assignee hereunder in the obtaining and sustaining of any and all such Letters Patent as the assignee may desire to apply for, but at the expense of said assignee.

The Commissioner of Patents or other proper official is hereby authorized and requested to issue said Letters Patent to said Washington University in accordance with this Assignment.

IN WITNESS WHEREOF, I have hereunto set my hand the  $\underline{\mathcal{P}}_{day}$  day of  $\mathcal{O}_{ch}\mathcal{O}_{ch}$  1998.

PATENT REEL: 9539 FRAME: 0654 STATE OF MISSOURI

COUNTY OF ST. LOUIS

On this <u><u></u> day of <u>O</u><u>(</u> 1998 before me, a Notary Public, within and for the County of St. Louis, State of Missouri, personally appeared Christopher I. Byrnes, to me known to be the person described in and who executed the foregoing assignment and acknowledged that he executed same as his free act and deed.</u>

SS

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal the date and year last above written.

a Ragodale

My Commission Expires: May 19, 2002



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PATENT REEL: 9539 FRAME: 0655