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ASSIGNMENT

We, ROBERT B. FORD, citizen of the United States of America, residing at 316 Playground Drive, West Reading, Pennsylvania 19611; and CHRISTOPHER A. MICHALUK, citizen of the United States of America, residing at 2306 Cassard Circle, Gilbertsville, Pennsylvania 19525, respectively, having invented the subject matter described in U.S. Patent Application entitled, "HOLLOW CATHODE TARGET AND METHODS OF MAKING SAME," the specification of which was filed on 9 November 2001, in the United States Patent and Trademark Office, as Serial No. 10/036,338, for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, hereby sell, assign, and transfer to Cabot Corporation, a Delaware corporation, having a principal place of business at Two Seaport Lane, Suite 1300, Boston, Massachusetts 02210-2019, its successors and assigns, the entire right, title and interest in and to said application and the inventions therein set forth and described, including all priority rights ensuing from said application, and any and all Letters Patent of the United States of America and of countries foreign thereto which may be granted on or for such inventions, together with the right to apply for such Letters Patent and all rights in any applications therefor. We further sell, assign and transfer to Cabot Corporation all right, title, and interest in any and all corresponding divisional, renewal, substitute, and continuation applications, and all corresponding reexamination and reissue certificates.

We hereby represent and warrant that there are no rights or interests inconsistent with the rights and interests granted herein and that we will not execute any instrument or grant or transfer any rights or interests inconsistent with the rights and interest granted herein, and we, ROBERT B. FORD and CHRISTOPHER A. MICHALUK, bind ourselves and our respective heirs, executors, administrators and legal representatives, as the case may be, to execute and deliver to Cabot Corporation, its successors and assigns, any further documents or instruments and do any and all further acts that may reasonably be deemed necessary by Cabot Corporation, to enable Cabot Corporation, its successors and assigns to file applications for the invention(s) in any country where it may elect to file such applications, and that may be necessary to vest in Cabot Corporation, its successors and assigns, the title herein conveyed or intended so to be, and to enable such title to be recorded in the United States and foreign countries where such application or applications may be filed.

And we further covenant and agree, in consideration of the premises, that we and our respective heirs, executors, administrators and legal representatives, as the case may be, will at any time, upon request, communicate to **Cabot Corporation**, its successors and assigns, any facts relating to the invention and the improvements contained therein and the history thereof, known to us or our respective heirs, executors, administrators and legal representatives, as the

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PATENT REEL: 013416 FRAME: 0925 case may be, and that we will testify as to the same in any interference or other litigation when requested so to do by **Cabot Corporation**, its successors and assigns.

| IN TESTIMONY WHEREOF, | I, ROBERT B. FORD , have hereunto set my hand this, 2002. |
|---|---|
| Of Branch | <u></u> |
| ROBERT B. FORD | |
| | . 9 |
| COMMONWEALTH/STATE OF COUNTY OF |) Montgameny |
| On this // this day of appeared ROBERT B. FORD, to me k | nown and kyrown to me to be the individual described in |
| the same for the purpose therein set forth | nent, and who duly acknowledged to me that he executed h. |
| | Writed & Byler |
| | NOTARY PUBLIC |
| | My Commission Experises Seal Dorothy L. Bixler, Notary Public Douglass Twp., Montgomery County My Commission Expires Feb. 20, 2003 |
| IN TESTIMONIV WHEDEOE | Member. Pennsylvania Association of Notaries I, CHRISTOPHER A. MICHALUK, have hereunto |
| set my hand this // Y day of $\frac{100}{100}$ | |
| | 77F |
| Man Mind | |
| CHRISTOPHER A. MICHALUK | |
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| COMMONWEALTH/STATE OF | , Reunigeriania |
| COUNTY OF | Miniganicy |
| On this /6+/) day of / COM appeared CHRISTOPHER A MICH | HALUK, to me known and known to me to be the |
| individual described in and who | executed the foregoing instrument, and who duly |
| acknowledged to me that he executed th | ne same for the purpose therein set forth. |
| | With & Bulli |
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| HAFitchMAssignments900030CIP-ASG.doc | My Commission Expires: Notarial Seal Dorothy L. Bixler, Notary Public Douglass Twp., Montgomery County My Commission Expires Feb. 20, 2003 |

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