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	mmissioner for Patents: iginal documents or copy thereof.
<pre>1. Name of conveying party(ies): Larry G. OFFUTT</pre>	2. Name and address of receiving party(ies) Name: Arch Technology Corporation Internal Address:
3. Nature of conveyance:	Street Address: CityPlace One, Suite 300
☐ Security Agreement ☐ Change of Name	City: <u>St. Louis</u> State: <u>MO</u> ZIP: <u>63141-7056</u>
Execution Date: <u>June 5, 1998</u>	Additional name(s) & address(es) attached? □ Yes ⊠ No
4. Application number(s) or patent number(s): If this document is being filed together with a net the execution date of the application is:	
If this document is being filed together with a ne	w application, B. Patent No.(s)
If this document is being filed together with a nethe execution date of the application is: A. Patent Application No.(s) 09/037,405, filed March 10, 1998	
If this document is being filed together with a nethe execution date of the application is: A. Patent Application No.(s) 09/037,405, filed March 10, 1998 Additional numbers 5. Name and address of party to whom correspondence concerning document should be mailed:	B. Patent No.(s)
If this document is being filed together with a net the execution date of the application is: A. Patent Application No.(s) 09/037,405, filed March 10, 1998 Additional numbers 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Richard L. Byrne Internal Address: Webb Ziesenheim Bruening Logsdon Orkin & Hanson, P.C. Street Address: 700 Koppers Building	B. Patent No.(s) Sattached? D Yes & No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41)\$ Enclosed
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If this document is being filed together with a net the execution date of the application is: A. Patent Application No.(s) 09/037,405, filed March 10, 1998 Additional numbers 5. Name and address of party to whom correspondence concerning document should be mailed: Name: Richard L. Byrne Internal Address: Webb Ziesenheim Bruening Logsdon Orkin & Hanson, P.C. Street Address: 700 Koppers Building 436 Seventh Avenue City: Pittsburgh State: PA ZIP: 15219-1818 /1998 DMGUYEN 00000031 09037405	B. Patent No.(s) 8 attached? □ Yes ⊠ No 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41)\$ 2 Enclosed □ Authorized to be charged to deposit account

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3

ASSIGNMENT

WHEREAS, I, LARRY G. OFFUTT, residing in Shorncliffe, Queensland, Australia, together with DAVID A. CHRISTOPHER, have invented certain new and useful improvements in "ELECTRICAL CONTROL SYSTEM FOR APPARATUS AND METHOD FOR CONTINUOUS UNDERGROUND MINING" for which a patent application was filed in the United States Patent and Trademark Office on March 10, 1998 and bears Serial No. 09/037,405;

AND, WHEREAS ARCH TECHNOLOGY CORPORATION, a corporation of Delaware having a place of business at CityPlace One, Suite 300, St. Louis, Missouri 63141-7056, hereinafter called the "assignee", is desirous of acquiring the entire right, title, and interest in and to said application and the inventions and improvements therein disclosed.

NOW, THEREFORE, for good and valuable consideration paid to me by said assignee, the receipt of which is hereby acknowledged, we do hereby assign, sell, transfer, and set over unto said assignee the entire right, title and interest in and to said application and the inventions and improvements therein disclosed for the United States and all foreign countries and any Letters Patent which may issue therefor in the United States and all foreign countries and all divisions, reissues, continuations, continuations—in—part, renewals, and/or extensions thereof, said assignee to have and to hold the interests herein assigned to the full ends of the terms of said Letters Patent and any and all divisions, reissues, continuations, continuations—in—part, renewals, and/or extensions thereof, respectively, as fully and entirely as the same would have been held and enjoyed by me had this assignment not been made.

The Commissioner of Patents and Trademarks is requested to issue such Letters Patent in accordance herewith. We covenant that we are the lawful owner of the said application, inventions, and improvements, that the same are unencumbered, that no license has been granted to make, use, or vend the said inventions or improvements or any of them, and that we have the full right to make this assignment.

And for the consideration aforesaid, we agree jointly and individually that we will communicate to said assignee or the representatives thereof any facts known to us respecting said inventions and improvements, and will, upon request, but without expense to me, testify in any legal proceedings, sign all lawful papers, execute all divisional, reissue, continuation, continuation-in-part, renewal, and/or extension applications, make all rightful oaths, and generally do all other and further lawful acts, deemed necessary or expedient by said assignee or by counsel for said assignee, to assist or enable said assignee to obtain and enforce full benefits from the rights and interests

herein assigned. This assignment shall be binding upon our heirs, executors, administrators, and/or assigns, and shall inure to the benefit of the heirs, executors, administrators, successors, and/or assigns, as the case may be, of said assignee.

By:

ANEONEY-GENERALS

DEPARTMENT

PROBLEM 198

Date: 1998

Inventor:

arry G. Offutt

Date: 5 June 98