

ASSIGNMENT

WHEREAS, we (1) Martin A. Callaway, (2) Robert D. Adair, (3) Kenneth S. Murphy, and (4) Theodore J. Maniurski, hereinafter called "ASSIGNORS", residing at (1) HC 80 Box 512, Nallen, West Virginia; (2) 8395 East Pontaluna, Nunica, Michigan; (3) 3839 Applewood, Muskegon, Michigan; and (4) 7264 Durham Road, Whitehall, Michigan have invented certain new and useful improvements in VAPOR DEPOSITION TEMPERATURE CONTROL APPARATUS AND METHOD for which application Serial No. 09/201,648 for United States Letters Patent was filed on November 30, 1998; and

WHEREAS, Howmet Research Corporation hereinafter called "ASSIGNEE", a corporation of the State of Delaware having a place of business at 500 Warner St., Whitehall, Michigan 49461 is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefor in the United States and in any and all foreign countries.

NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, the receipt whereof is hereby acknowledged, and other valuable consideration, we the ASSIGNORS have sold, assigned and transferred, and by these presents do sell, assign and transfer unto said ASSIGNEE the full and exclusive right to said invention in the United States and its territorial possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations and extensions thereof.

We hereby authorize and request the Patent Office Officials in the United States and in any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of the entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its successors and assigns.

FURTHER, we agree that we will communicate to said ASSIGNEE or its representative any facts known to us respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, substitution, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths or declarations, and generally cooperate with said ASSIGNEE, its successors and assigns, to obtain and enforce proper protection for said invention in the United States and in any and all foreign countries.

IN WITNESS WHEREOF, we have hereunto set our hands this 27 day of JANUARY, 1999.

Signed in the presence of:

Raymond C. Centes

Signed: X Martin A. Callaway
Martin A. Callaway

Signed: _____
Robert D. Adair

Signed: _____
Kenneth S. Murphy

Signed: _____
Theodore J. Maniurski

STATE OF West Virginia)
)ss.
COUNTY OF Fayette)

X

On this 27th day of January, 1998 personally appeared before me the above-named Martin A. Callaway, Robert D. Adair, Kenneth S. Murphy, and Theodore J. Maniurski, to me known and known to me to be the persons described in and who executed the foregoing instrument and acknowledged the same to be their free act and deed in and for the purposes set forth in said instrument.

Notarizing for Martin A. Callaway Only



Mary J. Bowling
Notary Public

X

March 19, 2007
My Commission expires

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IN WITNESS WHEREOF, we have hereunto set our hands this 14 day of January 1999.

Signed in the presence of:

J. Moorea Ormsa

Signed: _____
Martin A. Callaway

Signed: *X* *Robert D. Adair*
Robert D. Adair

Signed: _____
Kenneth S. Murphy

Signed: _____
Theodore J. Maniurski

ASSIGNMENT

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IN WITNESS WHEREOF, we have hereunto set our hands this 15 day of January, 1999.

Signed in the presence of:

Signed: _____
Martin A. Callaway

Signed: _____
Robert D. Adair

F. Modhean Groom

Signed: *Kenneth S. Murphy*
Kenneth S. Murphy

F. Modhean Groom

Signed: *Theodore J. Maniurski*
Theodore J. Maniurski

STATE OF MICHIGAN)
COUNTY OF MUSKEGON) ss.

X

On this 15 day of JANUARY, 1998 personally appeared before me the above-named Martin A. Callaway, Robert D. Adair, Kenneth S. Murphy, and Theodore J. Maniurski, to me known and known to me to be the persons described in and who executed the foregoing instrument and acknowledged the same to be their free act and deed in and for the purposes set forth in said instrument.

F. Moonean Brumm
Notary Public

Y

SEAL

10-01-00
My Commission expires

F. MOONEAN BRUMM
NOTARY PUBLIC MUSKEGON COUNTY, MI
MY COMMISSION EXPIRES OCTOBER 1, 2000