

ATTORNEY'S DOCKET NO.: 504835041050

PATENT
Joint

ASSIGNMENT

WHEREAS, WE,

ROBERT A. SHANNON
32526 Electric Boulevard
Avon Lake, Ohio 44012

LAWRENCE VINCENT RICH
2006 Broadhills Farm
Caraopolis, Pennsylvania 15108

FRANK CHRISTIAN GILBERT
6927 Woodwalk Road
Brecksville, Ohio 44141

have made an invention in

METHOD AND APPARATUS FOR UNIFORMLY HEATING A FURNACE

for which application for Letters Patent of the United States has been filed concurrently herewith; and

WHEREAS, NORTH AMERICAN MANUFACTURING COMPANY (hereinafter "North American"), a corporation organized and existing under the laws of Ohio and having its principal place of business at 4455 East 71st Street, Cleveland, Ohio, 44105, 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, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, we do hereby sell, assign, and transfer unto said North American, its successors and assigns, the entire right, title and interest in and to said invention or inventions, as described in the aforesaid application, in any form or embodiment thereof, and in and to the aforesaid application; and in and to any applications filed in any foreign country based thereon, including the right to file said foreign applications and to claim priority under the provisions of the International Convention; also any improvements on said invention or inventions now or hereafter made by me during the period of my employment; also the entire right, title and interest in and to any and all patents or reissues or extensions thereof to be obtained in this or any foreign country upon said invention, inventions, or improvements and any divisional, continuation, continuation-in-part or substitute applications which may be filed upon said invention, inventions, or improvements in this or any foreign country, and we hereby authorize and request the issuing authority to issue any and all patents on said application or applications to said North American, as assignee of the entire interest.

We do hereby agree for ourselves and for our heirs, executors, and administrators to execute any lawful document and to testify as to any material fact or thing which North American, its successors and assigns, may deem necessary in order to secure unto itself its successors and assigns the full right, title and interest in and to the full enjoyment of said invention or any part thereof and the said Letters Patent or any of them, the same to be done without any further consideration.

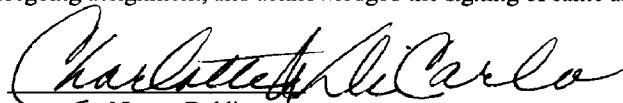
IN TESTIMONY WHEREOF, we have hereunto set our hands and seal on the date set after our signatures.


Robert A. Shannon Oct. 7, 1998

STATE OF Ohio
COUNTY OF Cuyahoga

On this 7th day of Oct, 1998 before me personally appeared ROBERT A. SHANNON, to me personally known, and known to me to be the person who signed the foregoing assignment, and acknowledged the signing of same as his free act and deed.

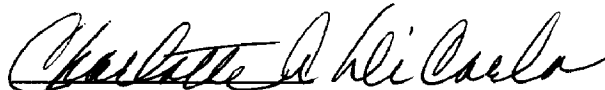
CHARLOTTE A. DICARLO
Notary Public, State of Ohio
Recorded in Cuyahoga Cty.
My Comm. Expires 03-26-2000


Notary Public


Lawrence Vincent Rich Oct 8, 1998

STATE OF Ohio
COUNTY OF Cuyahoga

On this 8th day of Oct., 1998 before me personally appeared LAWRENCE VINCENT RICH, to me personally known, and known to me to be the person who signed the foregoing assignment, and acknowledged the signing of same as his free act and deed.


Notary Public


Frank Christian Gilbert Oct. 8, 1998

CHARLOTTE A. DICARLO
Notary Public, State of Ohio
Recorded in Cuyahoga Cty.
My Comm. Expires 03-26-2000

STATE OF Ohio
COUNTY OF Cuyahoga

On this 8th day of Oct, 1998 before me personally appeared FRANK CHRISTIAN GILBERT, to me personally known, and known to me to be the person who signed the foregoing assignment, and acknowledged the signing of same as his free act and deed.


Notary Public