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IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

Applicant : Albert L. Saari
For : Humidity Control Device
Docket No. : S 836-001-PAT

FEE CALCULATION SHEET

Commissioner of Patents and Trademarks
U.S. Patent and Trademark Office
Washington D. C. 20231

Sir:

The fees due for filing in the patent application of:

Inventor(s) : Albert L. Saari
Title : Humidity Control Device

Are calculated as following:

Reduced fees are applicable based on the enclosed Verified Statement claim
Small Entity status.

13316 U.S. P.T.O.
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FEE CALCULATION SHEET

Attorney Docket No. S 836-001-PAT

Commissioner of Patents and Trademarks
 U.S. Patent and Trademark Office
 Washington, D.C. 20331

Sir/Madam:

The fees due for filing in the patent application of:

Inventor(s): Albert L. Saari

Title: Humidity Control Device

Are calculated as follows:

Reduced fees are applicable based on the enclosed Verified Statement claiming Small Entity status.

FOR:	(Col. 1) NO. FILED	(Col. 2) NO. EXTRA	Small Entity RATE	FEE	OR	Large Entity RATE	FEE
BASIC FEE			\$385.00 =	\$385.00	=		\$__
TOTAL CLAIMS	Total # of Claims - 20	# of Extra Claims 15:	15 x 11 =	\$165.00	x 22 =		\$_____
INDEP CLAIMS	# of Ind. Claims - 3	# of Extra Claims 3:	3 x 38 =	\$114.00	x 74 =		\$_____
___ Multiple Dependant Claim(s) Presented			+ 115 =	\$_____	+ 230 =		\$_____
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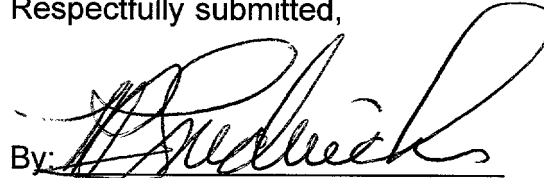
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____ Please charge Deposit Account No.06-1988 in the amount of \$ _____.
This sheet is submitted in triplicate.

A check in the amount of \$664.00 to cover the filing fee is enclosed.

____ The Commissioner is authorized to charge payment of any patent application processing or filing fees under 37 CFR §§ 1.16 and 1.17 or credit any overpayment to Deposit Account No. 06-1988. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

By: 

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HUMIDITY CONTROL DEVICE

Field of the Invention

5 The present invention relates to humidity control devices and more particularly to humidity control devices for use in cases for storing stringed instruments and the like as well as use with storage of cigars; gummy bears/licorice; dried fruit; electronic devices; fine jewelry; fire arms; transportation of fine art objects such as paintings, sculptures,
10 tapestries as well as the objects themselves and whatever is best stored under constant humidity conditions.

Background of the invention.

15 Humidity control devices have been known for many years. Perhaps one of the earliest humidity control devices was simply a pan of water setting on a stove or heater. The pan was repeatedly re-filled with water as the heat from the stove or heater evaporated the water. The water vapor raised the humidity in an environment of low moisture.

20 It is well recognized that during cold weather, particularly in the Northern climes, the indoor moisture content may often be very low. This low humidity causes damage. For example, the drying out of wood pieces that have been glued together often results in the wooden pieces coming apart at glued joints. In other words, wooden furniture with pieces glued together become loose and eventually may entirely separate. Legs may fall off chairs or legs may become disassociated from a table.

25 Over the years, sophistication has developed in humidity control devices. Homes

today often include a humidifier that is associated with the central furnace or heating system. Water is automatically fed into the humidifier. The water is exposed to warm moving air which picks up the moisture, carrying the water vapor throughout the home. Electronic controlled humidity regulators are very effective, but expensive and not very portable. Desiccants have been used to completely or almost completely remove all the humidity in the air. Desiccants typically leave the humidity at or quite near zero percent.

In other instances environments may contain an excess amount of water vapor. Such a condition is typically confronted in the below ground level portion of the house, typically referred to as a basement. If the basement is located in a soil environment that contains high moisture, the moisture may move through the walls e.g. concrete, of the basement raising the moisture content in the basement air to an unacceptably high level.

Devices have been designed to lower the moisture content, such devices are commonly referred to as dehumidifiers. These devices often work on a principle of refrigeration. The devices include a coil (tubular coil) through which a compressible fluid is passed. When the fluid is permitted to expand, the fluid rapidly lowers the temperature of the tubing. As moist air is passed over the tubing, condensation takes place on the tubing forming water which drops down into a removable pan. Periodically the pan is removed and emptied. All too often, the dehumidifier is forgotten, the pan overflows onto the floor and the water then evaporates, again raising the humidity.

Humidifying devices and dehumidifying devices of the type just described are generally not suitable for use in an instrument case containing a violin. The described humidifying devices and dehumidifying devices take up a substantial amount of space and

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