



TO: Senate Committee on Judiciary  
FROM: Jon Chandler (jchandler@oregonhba.com)  
RE: SB 1540  
DATE: February 12, 2014

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The Oregon Home Builders Association supports SB 1540 and urges you to move it to the floor with a Do Pass recommendation.

A meeting conflict outside the building prevents me from attending today's hearing in person, but I hope you'll have the time to review the letter that is being transmitted with this memo: builders all across Oregon started letters like this one last week. The letter asserts a patent claim with no evidence of any violation, offers a 'license' of \$150/housing unit to avoid an infringement action, and gives the recipients only a week to comply.

In pertinent part, the letter states:

Because the patent covers conduct that you are presently using, or *may use in the future*, for a moisture removal system, Savannah IP, Inc. believes that your present *or contemplated use* of a moisture removal system reads on this patent and thereby constitutes infringement.  
(emphasis added)

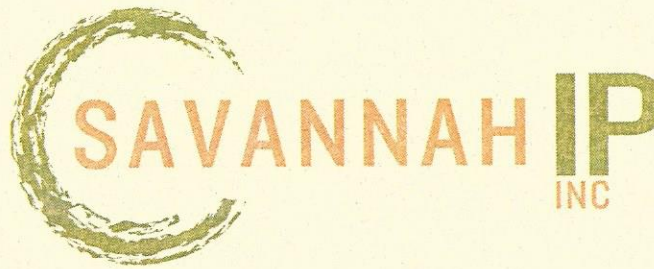
In other words, the letter presents precisely the sort of shakedown that SB 1540 is designed to prevent.

And the patent being asserted? Essentially the use of heaters and fans to reduce the moisture content of lumber during the construction process.

Why the US Patent Office allowed a patent on a generic process is mystifying, but the potential damage that will arise from their dereliction is huge: at \$150/unit, I can see many builders opting to simply pay the ransom rather than fight the claim, regardless of its absurdity. This hurts small businesses, increases the cost of housing, and rewards unscrupulous behavior...none of which are good outcomes.

SB 1540 is needed, in other words. We hope you'll agree and will vote to move the bill forward so that builders and others faced with claims of this sort will have a remedy.

Thank you, and please let me know if you have any questions.



February 3, 2014

Re: NOTICE CONCERNING U.S. PATENT NO. 8,567,688 PERTAINING TO .  
MOISTURE REMOVAL PROCESS

Dear, Rich Bailey Construction

We are writing to you to put you on notice of a recently issued U.S. patent that covers certain moisture removal processes that you are presently using, or may use in the future, in your construction business.

On October 29, 2013, the U.S. Patent & Trademark Office issued Patent No. 8,567,688 pertaining to "Moisture Reduction and Mold and Moisture Damage Preventative System and Method in Construction." This patent deals with measuring moisture content, and includes a moisture removal system and method employing air movers, dehumidifiers, heaters and attendant methods for reducing moisture in a construction project.

A copy of the issued patent is enclosed for your reference.

The patent has been assigned by its inventors to Savannah IP, Inc. Because the patent covers conduct that you are presently using, or may use in the future, for a moisture removal system, Savannah IP, Inc. believes that your present or contemplated use of a moisture removal system reads on this patent and thereby constitutes infringement.

In addition to placing you on notice of the issuance of this patent, Savannah IP, Inc. seeks to provide an opportunity for you to avoid infringing the patent and becoming the subject of an infringement action. Specifically, Savannah IP, Inc. agrees to offer a non-exclusive and limited license to you for use of the patented process. If you agree to enter into the offered license, then your conduct of engaging in a moisture removal system will not subject you and your customers to an infringement claim provided that the terms of the license are complied with.

Savannah IP, Inc. is taking the liberty of enclosing a license agreement at this time. If you agree to enter into the license, then review and fill out the enclosed form and return to Savannah IP, Inc. Feel free to contact us with any questions.

We must hear from you no later than one week from the date of this letter. If you fail to agree to a license by that date, then we will assume that you refuse to enter into a license for the patented moisture removal process.

Feel free to contact Savannah IP, Inc. at 971-801-6778 should you have any questions.

Phone: 971.801.6778 Fax: 971.801.6779  
14200 SE McLoughlin Blvd. Suite G Milwaukie, OR 97267



## PATENT LICENSE – BUILDER

*[Moisture Reduction and Mold and Moisture Damage  
Preventative System and Method in Construction]*

This Patent License is entered into as of the Effective Date defined below between Savannah IP, Inc., an Oregon corporation, as LICENSOR, and the LICENSEE identified below.

### RECITALS

*WHEREAS*, LICENSOR is the owner by assignment of all right, title and interest in U.S. Patent No. 8,567,688, filed on July 16, 2003, entitled “Moisture Reduction and Mold and Moisture Damage Preventative System and Method in Construction” (the “Patent”), in one or more continuation applications of the Patent, and in U.S. Patent Application Publication No 2005/0011255, filed July 16, 2003, entitled Building Moisture Content Certification System and Method, (collectively, the “Patents”);

*WHEREAS*, LICENSEE is engaged in the business of providing and/or using a moisture removal process in housing units, or is otherwise involved in the construction of housing units for which moisture removal processes are used, and desires a non-exclusive license under the Patents to practice the licensed process, method and/or system that are covered by the Patents (the “Licensed Process”);

*NOW, THEREFORE*, in consideration of the above recitals and subject to the terms and conditions set forth below, the parties agree as follows:

### LICENSE

1. **GRANT OF LICENSE.** Subject to the terms and conditions of this Patent License, LICENSOR hereby grants to LICENSEE, and LICENSEE hereby accepts, a non-exclusive, non-transferrable, terminable right and license for the Territory and during the Term to use, practice and/or to commercially exploit the Licensed Process, without a right to sublicense.
2. **TERRITORY.** The Territory for the Patent License is the United States of America, its territories, trust lands and possessions.
3. **TERM.** The initial Term of this Patent License commences as of the Effective Date and terminates at 11:59 p.m. on December 31st of the same calendar year. Provided that (a) LICENSEE is not in default of any provision of this Patent License, or any default by LICENSEE has been expressly waived in writing by LICENSOR, (b) LICENSOR has not provided written notice of its refusal to continue the Patent License in force, or (c) LICENSEE has not become dissolved, terminated its business, filed a petition in bankruptcy, been adjudicated a bankrupt or insolvent, or made an assignment for the benefit of creditors, then this Patent License shall automatically renew beyond December 31st for the next succeeding full calendar year, to terminate at 11:59 p.m. on the following December 31st, subject to the same renewal procedure during each successive calendar year thereafter.
4. **COMPENSATION AND REPORTING.**
  - a. **PATENT LICENSE FEE.** There is due and payable to LICENSOR hereunder a Patent License Fee equal to \$150.00 US, plus any applicable sales or use tax not otherwise exempt from collection, for each and every housing unit on which LICENSEE commences construction. LICENSOR shall invoice LICENSEE for this fee approximately sixty days following issuance of a building permit to LICENSEE or for LICENSEE’S benefit. The invoice is due and payable in full no later than thirty days following the date of invoice. All past due invoices accrue interest at 9% per annum from the due date until paid in full. Payment is not effective until receipt of collected funds received by LICENSOR at its business address in U.S. funds. LICENSOR is permitted to modify the Patent



License Fee following thirty days advance written notice to LICENSEE. Notwithstanding the foregoing, the LICENSEE shall receive a credit from LICENSOR equal to the Patent License Fee for each housing unit on which LICENSEE commences construction where the Licensed Process is provided by a third-party service provider who is licensed at the time by LICENSOR to provide the Licensed Process.

b. REPORTING. No later than January 10, April 10, July 10 and October 10 of each calendar year during the Term, or at such other reasonable times as may be requested in writing by LICENSOR, LICENSEE shall provide LICENSOR with a written statement in a form acceptable to LICENSOR certifying the addresses of new home building permits obtain by, or for the benefit of, LICENSEE during the immediately preceding calendar quarter. The receipt or acceptance by LICENSOR of any reporting statement or payment shall not prevent LICENSOR from subsequently challenging the validity or accuracy of such statement or payment.

c. AUDIT. LICENSOR shall have the right upon at least thirty days prior written notice to LICENSEE to inspect LICENSEE'S books and records in order to verify the accuracy and completeness of the Patent License Fee and reporting statements made by LICENSEE. All books and records relevant to LICENSEE'S obligations under this Patent License agreement shall be maintained and kept accessible and available for inspection for at least three (3) years after the end of the calendar year for which a Patent License Fee is due. In the event that the inspection reveals an underpayment by LICENSEE, then LICENSEE shall promptly pay the difference plus interest accrued thereon at 9% per annum from the date that the underpayment should have initially been paid, and plus LICENSEE shall reimburse LICENSOR for the reasonable cost of the inspection.

d. ENHANCED PATENT LICENSE FEE. In the event that LICENSEE fails to timely identify a housing unit to LICENSOR, or in the event that LICENSEE becomes in default of any provision of this Patent License agreement, then as a condition for reinstating LICENSEE under this Patent License LICENSOR may assess an enhanced Patent License Fee of \$1,000 for the first instance of failed reporting or default, and \$5,000 for any additional instance of failed reporting or default, together with all other claims and damages to which LICENSOR is entitled under this agreement. Notwithstanding this paragraph, LICENSOR is not required to reinstate LICENSEE under this Patent License agreement or to waive any breach hereunder.

5. CONFIDENTIALITY. The provisions of this Patent License agreement, including the Patent License Fee, the LICENSEE'S payments hereunder and the LICENSOR'S business practices are confidential and trade secrets of LICENSOR and shall not be disclosed by LICENSEE or its assigns, agents and representatives. The information obtained by LICENSOR from LICENSEE relating to LICENSEE'S business is confidential and trade secrets of LICENSEE and shall not be disclosed by LICENSOR or its assigns, agents and representatives. Notwithstanding the foregoing, the confidential information and trade secrets may be disclosed by a party to its legal and financial advisors for purposes of applying the provisions of this Patent License agreement and may be disclosed by a party pursuant to legal process or court order.

6. PATENT NOTIFICATION. LICENSEE is required to notify its customers that the moisture removal process being applied to a housing unit is covered by one or more of the Patents owned by Licensor, and to explicitly identify the Patent to its customers as U.S. Patent No. 8,567,688.

7. TERMINATION OF AGREEMENT.

a. BY LICENSOR. LICENSOR shall have the right to terminate immediately this agreement by giving written notice to LICENSEE in the event that any of the following events occur:

i. A petition in bankruptcy is filed by or against LICENSEE, or LICENSEE is adjudicated a



bankrupt or insolvent, or LICENSEE makes an assignment for the benefit of creditors or an arrangement pursuant to any bankruptcy law, or if LICENSEE becomes dissolved or terminates its business, or if a receiver is appointed for LICENSEE or for its business and such receiver is not discharged within thirty days.

- ii. LICENSEE assigns, or attempts to assign, its rights under this agreement without prior written consent of LICENSOR.
- iii. LICENSEE becomes in default of this agreement and fails to cure the default to the satisfaction of LICENSOR within sixty days following written demand to cure default from LICENSOR.

b. BY LICENSEE. LICENSEE shall not terminate this agreement except with the prior written consent of LICENSOR.

c. BY EXPIRATION OF PATENT. Notwithstanding the foregoing, this agreement terminates automatically upon expiration of the terms of the Patents.

8. NO PATENT CHALLENGE. LICENSEE, its assigns, agents and representatives, shall not take any action or position challenging the validity, existence and enforceability of the Patents. LICENSEE expressly waives any and all claims it may have regarding the validity, existence and enforceability of the Patents.

9. RIGHT OF USE. This agreement grants certain rights to LICENSEE. The LICENSEE is free to exercise the rights provided for hereunder so long as this agreement remains in effect and LICENSEE is not in breach. LICENSEE does not have the right to claim any credit or offset from any compensation due to LICENSOR hereunder in the event LICENSEE fails to use the rights provided for hereunder.

10. NO WARRANTIES BY LICENSOR. LICENSOR makes no warranties express or implied, including no warranties of merchantability or of fitness for a particular purpose, concerning the Patents or Licensed Process, including, but not limited to, the validity or enforceability of the Patents, and Licensor hereby expressly disclaims any and all representations and warranties, whether express or implied, that the Licensed Process does not infringe any third party's intellectual property rights.

11. DEFEND, INDEMNIFICATION AND HOLD HARMLESS. LICENSEE is solely responsible for practicing and applying the Licensed Process, and for using the Patents. LICENSOR does not warrant or guaranty the effectiveness of the Licensed Process as used by LICENSEE or any third-party service provider. Accordingly, LICENSEE shall defend, hold harmless and indemnify LICENSOR, its agents, representatives and assigns, from any and all claims, demands and actions arising from or relating to the use and application of the Licensed Process.

12. NO ASSIGNMENT, NO SUBLICENSE, NO THIRD PARTY RIGHTS. LICENSEE shall not assign its rights and obligations hereunder to any third party without the prior written consent of LICENSOR. LICENSEE shall not sublicense any rights hereunder to a third party. This agreement does not, and shall not be interpreted to, provide any third party beneficiary rights.

13. NO CONTINUING WAIVER. No waiver by either party of any default shall be deemed as a waiver of prior or subsequent default of the same or other provision of this agreement.

14. ATTORNEYS' FEES. In the event of any action or proceeding to enforce this agreement or to collect any obligation owed hereunder, whether or not a lawsuit is filed, then the prevailing party shall be entitled to an award of its reasonable attorneys' fees incurred prior to commence of litigation, during litigation or in any appeal.

15. **GOVERNING LAW, JURISDICTION, AND VENUE.** This agreement shall be governed by the laws of Oregon, other than its choice of law rules, and by relevant federal substantive law. All disputes hereunder shall be resolved in the applicable state or federal courts of Oregon. The parties consent to the jurisdiction of such courts, agree to accept service of process by mail, and waive any jurisdictional or venue defenses otherwise available.

16. **NOTICES.** Any notice permitted or required to be given under this agreement shall be in writing and delivered personally to the other party at the respective business address set out below, or mailed by certified, registered or Express Mail, return receipt requested, or by via overnight courier with next day delivery, to the respective business address set out below. Either party may change the address to which notice is to be sent by written notice to the other party as provided herein.

17. **BINDING ON SUCCESSORS.** This agreement shall be binding upon and shall inure to the benefit of the parties hereto and to their heirs, administrators, and if permitted successors and assigns.

18. **INTEGRATION.** LICENSEE acknowledges reading and understanding this agreement, and acknowledges that by entering into the agreement it agrees to be bound by its terms and conditions. LICENSEE further agrees that this agreement constitutes the entire understanding of the parties, and revokes and supersedes all prior discussions, understandings, communications and agreements between the parties and is intended as a final expression of their agreement. It shall not be modified or amended except in writing signed by the parties hereto and specifically referring to this agreement. This agreement shall take precedence over any other documents that may be in conflict therewith.

19. **EFFECTIVE DATE.** This agreement shall take effect the latter of the dates set out below.

IN WITNESS WHEREOF, the parties hereto, intending to be legally bound hereby, have each caused to be affixed hereto its or his/her hand and seal the day indicated.

<b>LICENSOR</b>	<b>LICENSEE</b>
<b>SAVANNAH IP, INC.</b> 14200 S.W. McLoughlin Blvd., Ste. G Milwaukie, Oregon 97267 Attn: Robert Weisenberger Phone: (971) 801-6778 EIN: _____	Name: _____  Address: _____ _____  Phone: _____  Signature: _____  Print Name: _____  Title: _____  Date: _____
Signature: _____  Print Name: _____  Title: _____  Date: _____	Signature: _____  Print Name: _____  Title: _____  Date: _____

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US008567688B2

(12) **United States Patent**  
**Weisenberger et al.**

(10) **Patent No.:** **US 8,567,688 B2**  
(45) **Date of Patent:** **Oct. 29, 2013**

(54) **MOISTURE REDUCTION AND MOLD AND MOISTURE DAMAGE PREVENTATIVE SYSTEM AND METHOD IN CONSTRUCTION**

FOREIGN PATENT DOCUMENTS

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(76) Inventors: **Andrew R. Weisenberger**, Milwaukie, OR (US); **Robert A. Weisenberger**, West Linn, OR (US)

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 304 days.

(21) Appl. No.: **10/621,859**

(22) Filed: **Jul. 16, 2003**

(65) **Prior Publication Data**  
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(51) **Int. Cl.**  
**F24F 3/14** (2006.01)  
**G01F 3/02** (2006.01)  
**F25B 49/00** (2006.01)

(52) **U.S. Cl.**  
USPC ..... **236/44 A; 236/44 R; 62/176.1**

(58) **Field of Classification Search**  
USPC ..... **236/44 A, 44 R; 62/176.1, 176.5, 150**  
See application file for complete search history.

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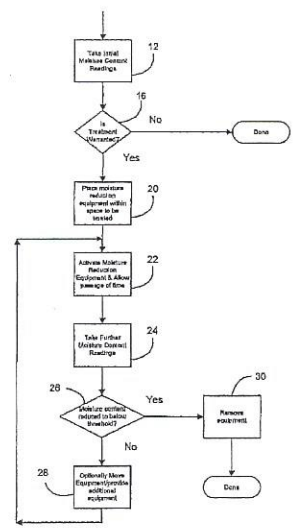
(Continued)

*Primary Examiner* — **Chen Wen Jiang**  
(74) *Attorney, Agent, or Firm* — **Stolowitz Ford Cowger LLP**

(57) **ABSTRACT**

A moisture removal system and method employing air movers, dehumidifiers, heaters and attendant methods for reducing moisture in a construction project. The method and system include operating moisture removal equipment and testing moisture content levels sufficient to reduce the moisture content levels to a desired threshold to reduce the likelihood of mold growing or moisture damage in the construction after it is completed.

**2 Claims, 1 Drawing Sheet**



# MOISTURE REDUCTION AND MOLD AND MOISTURE DAMAGE PREVENTATIVE SYSTEM AND METHOD IN CONSTRUCTION

## BACKGROUND OF THE INVENTION

This invention relates to buildings and construction, and more particularly to controlling moisture to reduce the likelihood of mold growth and moisture damage.

Mold and mildew problems in buildings are becoming more common, and can lead to substantial remediation efforts, with associated costs or litigation.

In building construction, whether commercial or single or multiple family residential, problems can arise if a particular level of moisture remains in walls at the time the walls are sealed. During construction, these buildings are typically wet, either from rain/snow or from wet construction materials being used, for example, wet wood, or materials that are applied in a wet state and then need to dry. Mold will typically grow in wood or other construction material when there is sufficient moisture present, for example, above 20% moisture in Douglas fir.

Mold spores can grow if sufficient moisture is sealed into construction material and there is an available food source. Should mold develop, it is often detected immediately, or sometimes such detection is delayed. In some cases, it is never detected.

Mold remediation, such as removal and prevention of future growth, is costly and time consuming. The existence of mold in a construction project can cause public relations issues, wherein the builder or project developer can be equated with the bad publicity related to the mold issues. Still further, legal issues can arise, related to the costs and delay of remediation, alleged health issues from occupants of the affected buildings, and contractual disputes arising over purchase or lease of the affected property, as a purchaser might wish to cancel a property transaction based on the mold issues.

Apart from mold issues, the presence of moisture alone can also lead to damage to structures and materials, resulting in costly remediation with corresponding issues to those noted hereinabove with respect to mold.

Financing and monetary requirements demand that structures be built as quickly as possible, to minimize the duration of construction financing, for example, and to increase construction-related revenue. Such time constraints result in framing being covered up as quickly as possible. These time constraints do not allow a builder to have a partially completed structure sit for weeks to allow any moisture in the construction materials to naturally reach equilibrium with its environment, and this increases the likelihood that wet materials may be sealed up, leading to a higher likelihood of mold growth or moisture damage occurring. Depending on climate factors, the business cycle of construction may not allow sufficient time for waiting for the natural drying process.

In particular in new construction, building practices resulting in an energy efficient structure may severely restrict airflow between the interior and exterior of a structure, resulting in trapping of moisture inside the structure. This can increase the likelihood of mold or moisture problems in structures today.

Heretofore, the issue of mold has been addressed as an afterthought in reactive fashion, only being tackled when mold appears, advising cleaning up mold quickly when it appears, for example.

## SUMMARY OF THE INVENTION

In accordance with the invention, a system and method is provided for removing moisture from a construction project,

to ensure sufficiently low moisture content is present in the construction before it is sealed.

Accordingly, it is an object of the present invention to provide an improved method for reducing moisture in construction projects below a desired level.

It is a further object of the present invention to provide an improved system for removing moisture from construction projects.

The subject matter of the present invention is particularly pointed out and distinctly claimed in the concluding portion of this specification. However, both the organization and method of operation, together with further advantages and objects thereof, may best be understood by reference to the following description taken in connection with accompanying drawings wherein like reference characters refer to like elements.

## BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a block diagram of the process according to the present invention.

## DETAILED DESCRIPTION

The system according to a preferred embodiment of the present invention comprises a system and method for reducing moisture content in a building or portion of a building under construction, wherein said reduction is made as a curative and preventative measure that takes place at a specific phase in the construction process.

Referring now to FIG. 1, which is a block diagram of the moisture reduction process according to the present invention, the system and method are typically employed, in the case of construction, after the roof, windows and doors are installed and before the so called finish trades (wall board, insulation, cabinetry, etc.) are done. When a decision to take the preventative measure has been made, initial readings of moisture content of construction materials, relative humidity and temperature are taken in the building under test (step 12). These measurements are made to determine how to effect moisture removal in the building and may be made, for example, with a GE Protimeter MMS Plus model by GE Protimeter, 500 Research Drive, Wilmington, Mass., US, or the Tramex Moisture Meter, from Tramex Ltd. of Dublin, Ireland moisture meter in particular embodiments.

Next, in step 16, a determination is made based on the results of the readings, whether preventative moisture removal is warranted. For example, if moisture content of Douglas fir is below 20% moisture content, moisture removal treatment may not be needed. If further treatment is not needed, then the process is complete at block 18. However, if further treatment is deemed advisable, then the process continues to block 20, wherein moisture reduction equipment is placed within the space that is to be treated. The specific moisture reduction equipment employed can vary based on the moisture removal needs of the structure, but typically will include air moving equipment, such as blowers, for circulating the air within the space, dehumidifiers to extract the moisture from the air and either contain it within the dehumidifier or dispose of it external to the space (by a drain tube, for example). Additionally, heating equipment may be employed, to raise the temperature within the space to increase the speed of moisture removal.

Examples of typical equipment that may be employed in the system and performing the method is as follows:

Blower: An electric portable blower that provides a continuous, high velocity airflow, such as model #797 Ace Tur-



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boDryer, from Dri-Eaz of Burlington, Wash., US, or the Dri-Eaz Santana SX model turbodryer, or the Gale Force air mover by Dry Air Technology of Burlington, Wash.

Dehumidifier: #721 DrizAir 1200, by Dri-Eaz of Burlington, Wash., US. This is a refrigerant dehumidifier which provides a 15 gallon per day maximum moisture removal output level, while drawing 6.4 amps current at 120V. Also, the DrizAir 2000, a 25 gallon per day model can be employed. Alternatively, a DriTec desiccant dehumidifier may be employed, which uses silica gel to adsorb moisture from the air, manufactured by Dri-Eaz of Burlington, Wash.

Heater: portable heaters, such as propane/natural gas powered heaters, such as the Dri-Eaz K85 mobile furnace, by Dri-Eaz of Burlington, Wash., US.

In a typical installation, four or five blowers or fans will be grouped together with one dehumidifier and heater in a given space.

Depending on the particular characteristics of the space being treated, openings into other rooms or other parts of a building are sealed off with some sort of vapor barrier (for example, plastic sheeting in roll form and duct tape to seal the sheeting to close off the opening). Also, window or door openings that do not yet have the windows or doors installed may be sealed in corresponding fashion.

Once the equipment is in place, the blowers and dehumidifier are activated (and heaters, if present) and they are allowed to run for a period of time (block 22), typically a 24 hour period, whereupon further moisture readings are taken (block 24) to track the progress of moisture removal. At decision block 26, a determination is made whether sufficient moisture has been removed from the space. If not, then the equipment is allowed to continue to operate. Optionally, the equipment may be moved around to different locations within the space being treated (block 28). The process loops back to allow the passage of time at block 22, and the time/readings/determine whether acceptable moisture content reduction has occurred cycle continues until the result of the decision block 26 is that yes, the moisture content has been reduced to an acceptable level (for example, 20% or lower moisture content). Then the moisture removal process is completed and the equipment is removed (block 30).

A typical time between the initial placement of the equipment and determination that the space has a sufficiently low moisture content level is 4 to 7 days. Of course this depends on a number of factors, including the initial moisture content of the space, the capacity of the moisture control equipment that is installed, and relative humidity and temperature, for example.

Some other possible variations in the process can occur. For example, if at block 24, when further readings are taken after the passage of time, it is determined that the moisture level is not being reduced (or is not being reduced at a sufficient rate), then additional blower/dehumidifier/heating equipment may be added. Further, if after a passage of time, the moisture levels are not reducing in a desired fashion, this typically indicates that moisture is leaking into the space from an outside source (for example an improperly installed roof is leaking) and investigation of the source of the moisture should be made.

Examples of application of the system and method are given below. The measurement goal for all tests in these particular examples is 18% moisture content:

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EXAMPLE 1

New construction, 1500 square feet.

Day 1, temperature 71.5° F., 36.7% relative humidity. 2 measurements were taken low along wall studs, giving 16 and 18% moisture content. 4 measurements were taken high along wall studs, giving 16, 24, 21 and 21%.

Moisture removal equipment was installed and allowed to run for the rest of day 1. On day 2, temperature was 64.7° F., 46.9% relative humidity. 2 measurements were taken low along wall studs, giving 16 and 18% moisture content. 4 measurements were taken high along wall studs, giving 16, 18, 18 and 18% moisture content. The moisture removal operation was judged completed.

EXAMPLE 2

New construction, 2200 square feet.

Day 1, temperature 69.4° F., 49.1% relative humidity. 7 measurements were taken low along wall studs, giving 25, 20, 25, 25, 15, 25 and 22% moisture content. 7 measurements were taken high along wall studs, giving 21, 19, 25, 25, 25, 25 and 25%.

Moisture removal equipment was installed and allowed to run. On day 2, temperature was 65.1° F., 55.3% relative humidity. 7 measurements were taken low along wall studs, giving 20, 17, 25, 25, 20, 21 and 20% moisture content. 7 measurements were taken high along wall studs, giving 22, 18, 23, 23, 15, 21 and 20% moisture content. The moisture removal operation was continued, and then further measurements were taken on day 3. 6 lower level measurements of 20, 18, 18, 18, 15 and 21% moisture content were taken, and 7 upper level measurements of 18, 17, 20, 23, 18, 18 and 20% were recorded. Moisture removal was continued and on day 4, 7 measurements were taken at both lower and upper levels, resulting in: lower 18, 18, 18, 18, 15, 18, 17; and upper 16, 16, 17, 16, 18, 16, 15. The moisture removal operation was judged completed at this state.

EXAMPLE 3

New construction, 2300 square feet.

Day 1, temperature 63.2° F., 38.0% relative humidity. 7 measurements were taken low along wall studs, giving 15, 20, 15, 15, 30, 30, and 16% moisture content. 7 measurements were taken high along wall studs, giving 30, 30, 30, 18, 25, 24 and 20%.

Moisture removal equipment was installed and allowed to run until day 2, when further measurements are made, temperature was 80.2° F., 29.5% relative humidity. Measurements low along wall studs were 15, 15, 15, 15, 20, 15 and 16% moisture content. High location measurements were 25, 20, 25, 18, 23, 20 and 20% moisture content. The moisture removal operation was continued until day 3, when measurements as follows were judged to have sufficiently accomplished the desired moisture removal: low, 15, 15, 15, 15, 18, 15, 16%; and high 18, 17, 18, 18, 16, 15, 18%.

EXAMPLE 4

New construction, 1500 square feet.

Day 1, temperature 68.8° F., 43.0% relative humidity. 4 measurements were taken low along wall studs, giving 21, 18, 15 and 17% moisture content. 7 measurements were taken high along wall studs, giving 15, 25, 25, 21, 16, 15 and 18%.

Moisture removal equipment was installed and allowed to run. On day 2, when further measurements are made, tem-



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perature was 58.4° F., 59.4% relative humidity. Measurements low along wall studs were 18, 18, 15 and 17% moisture content. High location measurements were 15, 18, 18, 17, 16, 15 and 18% moisture content. This was sufficient moisture removal to complete the operation.

EXAMPLE 5

New construction, 2150 square feet.

Day 1, temperature 57.4° F., 97.4% relative humidity. 7 measurements were taken low along wall studs, giving 20, 15, 20, 21, 40, 18 and 16% moisture content. Measurements taken high along wall studs were 20, 20, 23, 40, 22, 17 and 30%.

Moisture removal equipment was installed and allowed to run until day 2, when further measurements are made, temperature was 67.0° F., 47.9% relative humidity. Measurements low along wall studs were 15, 15, 15, 15, 18, 18 and 16% moisture content. High location measurements were 15, 15, 18, 16, 15, 17 and 17% moisture content. This was a sufficient moisture level to complete the operation.

EXAMPLE 6

New construction, 2500 square feet.

Day 1, temperature 68.0° F., 36.6% relative humidity. 7 measurements were taken low along wall studs, giving 13, 11, 12, 11, 11, 13 and 10% moisture content. Measurements taken high along wall studs were 12, 11, 13, 10, 12, 13 and 11%.

Since all measurements were below the target level, no moisture removal was performed as the area was already at a sufficiently low moisture content.

In making measurements, any wood surfaces are measured, but typically moisture content measurements are made at base plates, studs and floors. It is not necessary to measure every stud in the structure, because if a stud with moisture content above the moisture threshold is detected in an area, then moisture removal will be performed in the area, so it isn't required to keep measuring at that point. Thus, for example, if the first set of measurements taken is beyond the acceptable moisture threshold, taking additional measurements is not necessary, but can be completed if desired, to provide historical data for comparison when the moisture removal is completed, and more measurements might be taken to further show overall moisture levels. Thus, in performing the process, typically moisture content tests are made throughout the structure, but moisture removal is only needed to be done in those areas where the moisture content level is too high.

Thus, in accordance with the system and method, a preventative moisture removal is accomplished to bring the moisture content level within a space to a desired level below that which would support mold growth, to reduce the likelihood that mold or moisture damage problems will arise in the finished construction. Should mold or moisture damage prob-

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lems arise later, however, the builder has useful information to help locate the cause of the mold growth or moisture damage, as it is known from the use of the system and method that at a crucial point in the construction process, the moisture content level had been reduced sufficiently to prevent such growth or water damage. This information can help in determining what party might bear the responsibility for costs involved in mold or moisture damage remediation procedures. It can also assist in determining the construction stage at which a mold infestation or moisture entry took place.

While in the preferred embodiment, the moisture content level of 20% is a desired threshold, applied to Douglas fir wood, for example, below which the moisture content is desirably reduced, and while 18% was given as the threshold level in the illustrative examples herein, different levels may be appropriate in other types of wood and in other materials such as engineered woods (oriented strand board, plywood, fiberboard, etc.), wallboard or other materials.

While a preferred embodiment of the present invention has been shown and described, it will be apparent to those skilled in the art that many changes and modifications may be made without departing from the invention in its broader aspects. The appended claims are therefore intended to cover all such changes and modifications as fall within the true spirit and scope of the invention.

What is claimed is:

1. A process for treating a space within a construction of a new home to prevent structural damage and/or the growth of mold or mildew, comprising the steps of:
  - measuring moisture content using a moisture meter at a plurality of locations within the space, wherein said plurality of locations include low and high locations of a plurality of exposed wall studs;
  - determining whether the measured moisture content meets a threshold indication recommending that drying be performed;
  - positioning and operating only within the space at least one drying device for the purpose of reducing the moisture level within the space and thereby reducing the moisture level in structural components of the space, wherein the at least one drying device is selected from the group consisting of a dehumidifier, a space heater, and an air moving device; and
  - further comprising the step of substantially sealing off the space being treated with a vapor barrier relative to other space within said new home.
2. The process according to claim 1, wherein said at least one drying device is a dehumidifier and is operated for a period of time, whereupon one or more further moisture content readings are taken, and a decision is made whether to continue operating said dehumidifier based on whether said one or more further moisture content readings meet the threshold indication.

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