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(54) CALIBRATABLE MOOD PATCH-APPARATUS AND METHOD OF USE

 (75) Inventors: Janis A. DiCiacco, Denver, CO (US); Allen D. Hertz, Boca Raton, FL (US)

> Correspondence Address: ALLEN D. HERTZ 12784 TULIPWOOD CIRCLE BOCA RATON, FL 33428

- (73) Assignee: Mindful Moods, LLP, Denver, CO (US)
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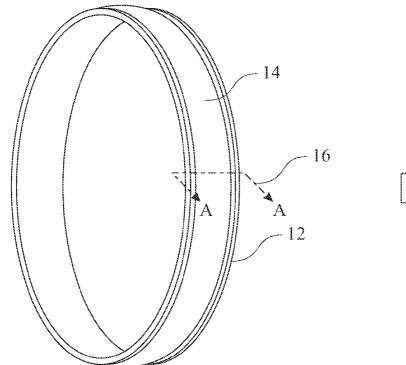
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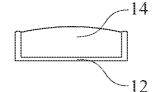
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(57) **ABSTRACT**

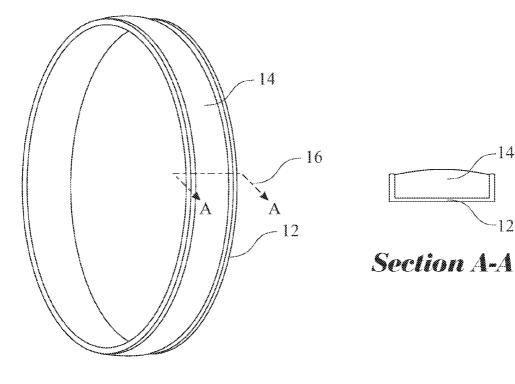
A mood patch is fabricated by applying a thermotropic crystal material onto a flexible backing material. An encapsulant is placed over the thermotropic crystal material. The mood patch is coupled to the skin of an individual using a nonallergenic adhesive. The adhesive is applied to the contact side of the backing material during the fabrication process or the application process. The mood patch changes color to indicate the emotional state of an individual. This change in state is used by a clinically trained person, a supervisor or other technically trained individual to monitor and react to a change in emotional state of an individual by monitoring and interpreting the presented color of the mood patch. The mood patch can be of any shape and further include artwork on the face to improve aesthetics. A plurality of thermotropic material deposits can be utilized, each with a different activation temperature allowing the user to calibrate to the wearer's current emotional state. A calibration indicator is incorporated to further aid in calibrating the mood patch.





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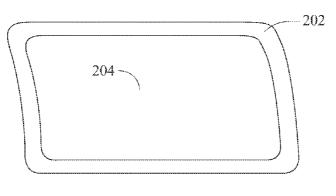


<u>10</u>



102 -	X		-102a
104	Black	Stressed, Tense, Feeling Harrie	d104a
106	Gray	Very Nervous, Anxious	
108	Amber / Yellow	A little Nervous, Anxious	-108a
110	Green	Relaxed, Normal, Average	
112	Blue - Green	Somewhat Relaxed	-112a
114 -	Blue	Calm, Relaxed	-114a
	Dark Blue / Navy	Happy, Romantic, Passionate	

<u>100</u>





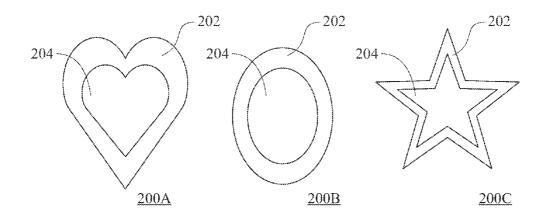
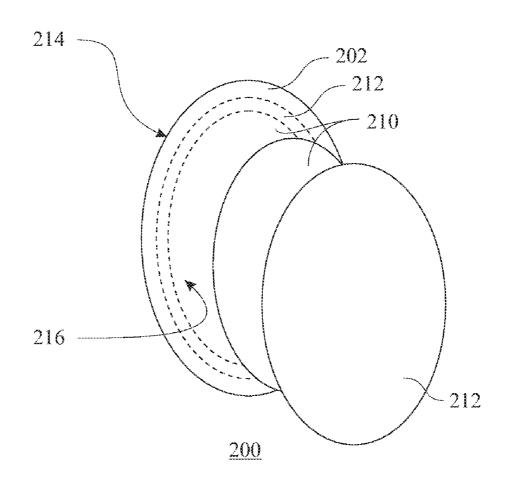
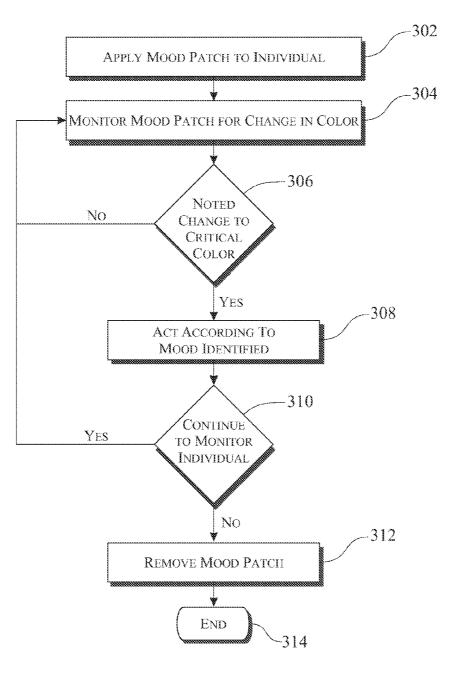
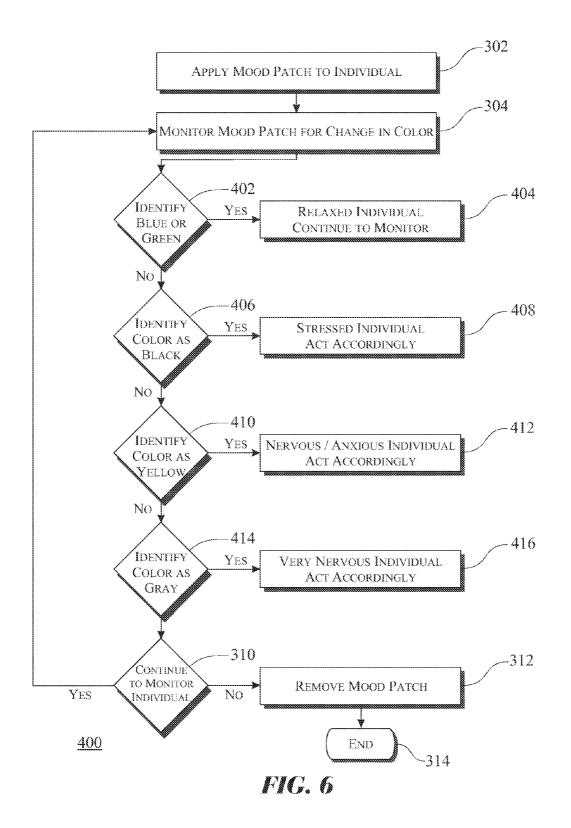


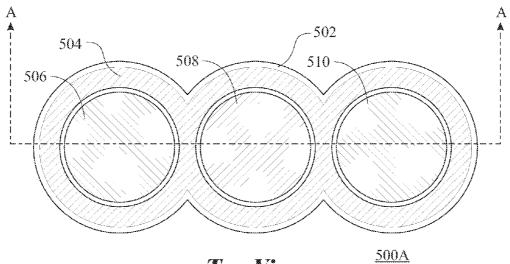
FIG. 3



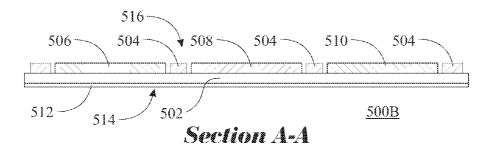


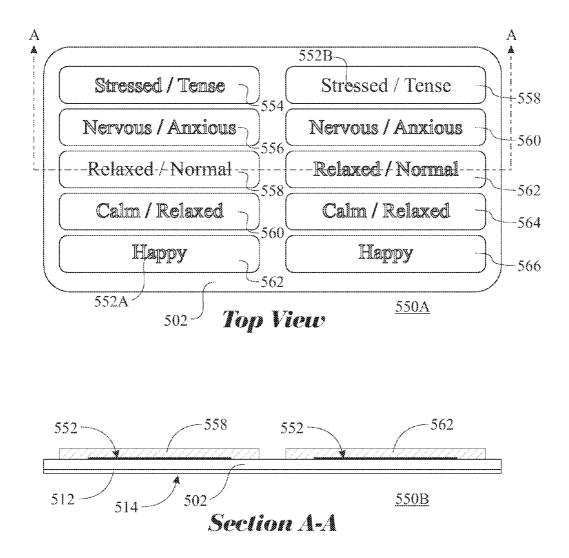
<u>300</u>





Top View





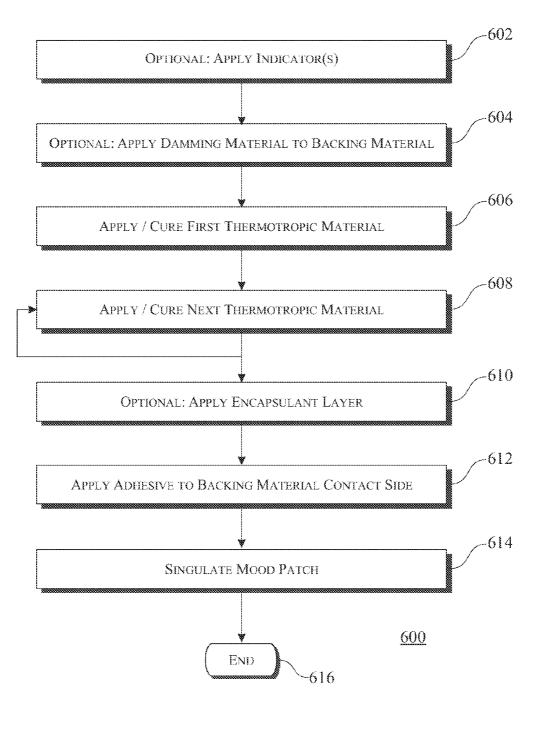
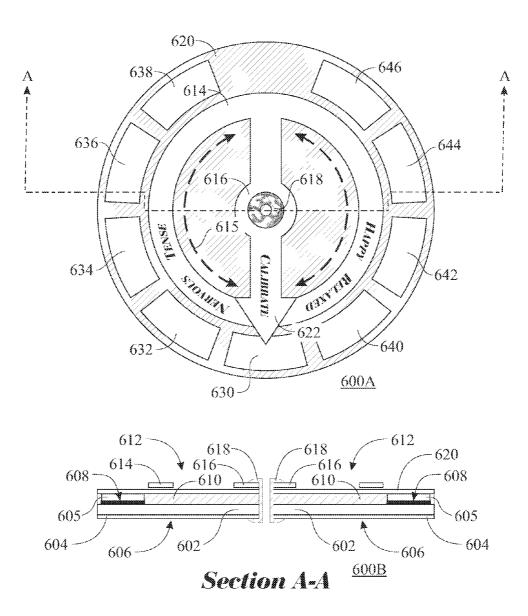


FIG. 9



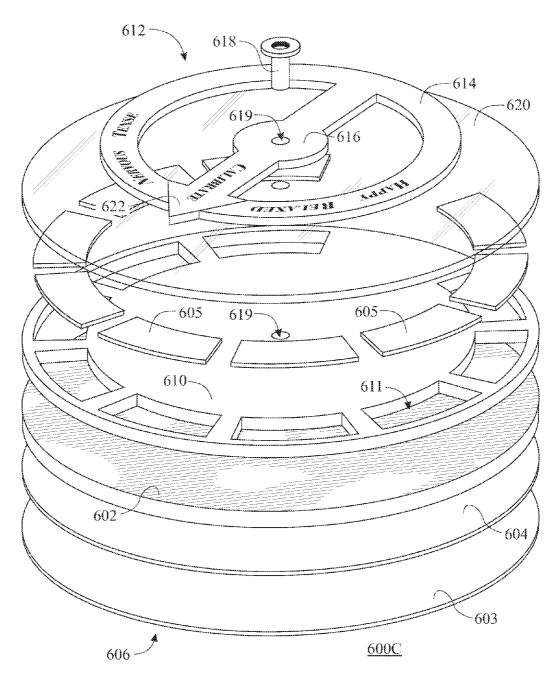
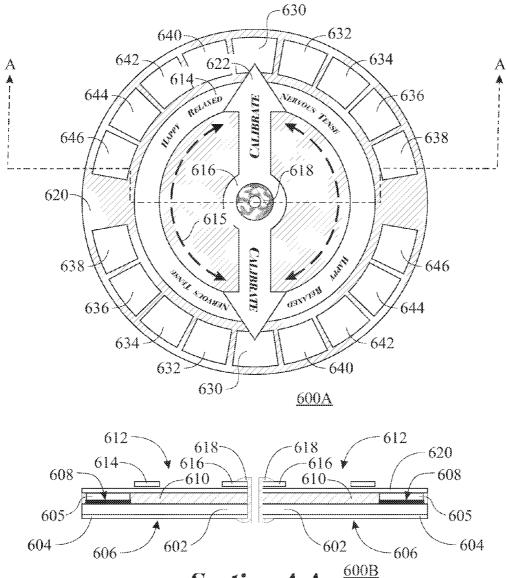
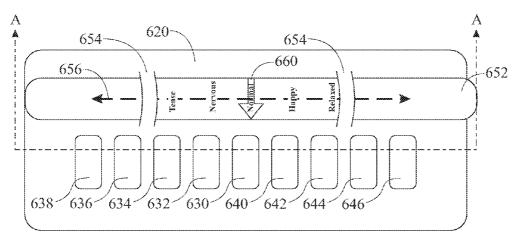


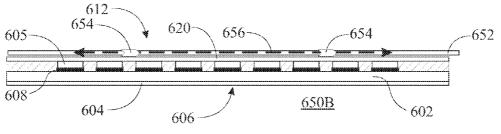
FIG. 11



Section A-A







Section A-A

CALIBRATABLE MOOD PATCH-APPARATUS AND METHOD OF USE

RELATED US APPLICATION DATA

[0001] This patent application claims priority to Provisional Patent Application 60/699,942 filed Jul. 16, 2005 and subsequently filed Utility application Ser. No. 11/474,012 filed on Jun. 23, 2006; all of which are incorporated herein by reference.

FIELD OF THE INVENTION

[0002] The invention relates to an apparatus and method using temperature sensing material(s) applied to a flexible backing for monitoring an individual's mood/emotional state for another to monitor to determine another's change in emotional state and guide the monitoring party to take a respective action.

BACKGROUND OF THE INVENTION

[0003] There are a number of known methods for identifying subtle changes in temperature. One such known method is incorporated in an apparatus commonly known as a Mood Ring. By wearing said Mood Ring, the rings "stone" changes color to reflect ones mood. The Mood Ring utilizes thermotropic liquid crystals placed into a hollow glass shell. The glass shell is then coupled to a material (Plastic, metal, etc.) in the shape of a ring. The thermotropic liquid crystals react to subtle changes in the wearer's physical reaction to change of emotional state (subtle changes in skin temperature). The thermotropic liquid crystals are very sensitive to changes in temperature. A change in temperature causes the thermotropic liquid crystals molecules to twist or change position. The resultant change in orientation causes a change in the molecular structure. The change in molecular structure changes the interaction with wavelengths of light resulting in an apparent change in color. Mood Rings are generally calibrated wherein the mid range of the color change is 82 Degrees Fahrenheit, the surface temperature of a typical individual.

[0004] The thermotropic liquid crystals are one name/form of material that can be used. Other names are Thermo-chromic liquid crystals. Thermo means temperature; Chromic means color. The material changes their reflective color as a function of temperature when illuminated by white light. There are different degrees of accuracy for the material.

[0005] Thermotropic materials are characterized by an activation temperature and a bandwidth. For example, an R40C5W describes a thermotropic material that activates with a Red color at 40C and the 5W implies start of a blue at 5C above the red color. Narrow band crystals are defined for formulations that have a bandwidth that is less than 2C.

[0006] Thermotropic materials can be encapsulated, wherein said thermotropic material is encapsulated in a 5-10 micron sphere, suspended in a water based binder material. The encapsulation provides good protection for the thermotropic material.

[0007] Alternately, thermotropic materials can be unencapsulated, wherein said thermotropic material is presented in its native form. This configuration provides brilliant colors, but is more susceptible to contamination.

[0008] Although Mood Rings are used to indicate emotional states of an individual, the practice has never been applied to clinical or professional consideration for behavioral communications. Additionally, mood rings have not been clinically proven as a therapeutic, investigative, evaluative tool.

[0009] The use of thermotropic liquid crystals was further applied to various apparatus to create thermometers. One such thermometer is taught by Fuller in U.S. Pat. No. 4,388, 139. Fuller teaches a process of applying a plurality of cholesteric liquid crystal compositions over a first substrate, then applying a second substrate over said first substrate such to encapsulate said cholesteric liquid crystal compositions. The second substrate further comprising apertures indicating the temperature. Said cholesteric liquid crystal compositions are respective to each indicated temperature and chemically unique such that each section reacts to such unique, calibrated temperature. When the thermometer is applied against an object comprising a temperature, said cholesteric liquid crystal compositions react respectively, wherein only one such specific cholesteric liquid crystal composition changes color and all others either remain clear or become black. This process indicates the respective temperature of the object.

[0010] Several other thermometers are fabricated using similar technology. A second such teaching is Inoue, et al., U.S. Pat. No. 4,154,106.

[0011] In all, the thermometers fail to teach the use of this type of technology for clinically treating emotional states of an individual.

[0012] Mood rings are generally small and difficult for another party to monitor.

[0013] It is not known to utilize mood rings (or similar) as a means for clinical treatment/emotional understanding of another party. One would need to understand the color/temperature/emotional state relationship of the wearer and current mood rings are very limited, as they assume the color range for an average wearer.

[0014] Current mood indicator devices utilize a single thermal changing material to identify a wearer's mood. Thermometers utilize a plurality of thermotropic liquid crystals, more specifically a plurality of cholesteric liquid crystal compositions which indicate a specific temperature.

[0015] What is desired is a means for an individual to monitor another's emotional state as a means to assist in clinical treatment/emotional understanding of another party. It is further desired that said means for monitoring another's emotional state is more accurate than a typical mood ring toy. It would be beneficial to be able to calibrate the apparatus to the wearer's current emotional state.

SUMMARY OF THE PRESENT INVENTION

[0016] A first aspect of the present invention is the ability for a supervisor to monitor a supervisee's emotional state such to provide a clinical insight into the supervisee's emotional state. Said supervisor would be any monitoring party and said supervisee would be any wearer of a Mood Patch apparatus. Alternate terms such as Clinician/Doctor or patient can be used respectively.

[0017] A second aspect of the present invention is the ability for a supervisor to identify, consider and optionally react to a change in the supervisee's emotional state.

[0018] A third aspect of the present invention is the ability for a supervisor to identify, consider and optionally react to a change in the supervisee's emotional state as a result of observing the change in state of a Mood Patch.

[0019] A fourth aspect of the present invention is the ability for a supervisor to identify, consider and optionally react to a

change in the supervisee's emotional state as a result of observing the change in state of a Mood Patch, wherein said supervisee's are at least one of:

- [0020] Students
- [0021] Emotionally handicapped students
- [0022] Son/Daughter
- [0023] Patient(s)
- [0024] High Stress employment positions (Air Traffic Controllers, Doctors, Pilots, Corporate Executives, etc.)
- [0025] Athletes
- [0026] Detainees (arrested personal, etc.)
- [0027] Military Personnel
- [0028] Trauma workers

[0029] A fifth aspect of the present invention is the ability for a supervisor to react to a change in the supervisee's emotional state as a result of observing the change in state of a

- Mood Patch, wherein said supervisors are at least one of: [0030] Physicians/Surgeons/Dentists/Nurses/Medical Personnel
 - [0031] Therapists (psychologists, social workers, counselors, behavior specialists, etc.)
 - **[0032]** Geriatric Support Personnel—Therapists (Mental Health, Physical therapy, Occupational therapy, Speech therapy, and the like)
 - [0033] Teachers/Classroom Monitors (General, Special Education, and the like)

[0034] Occupational Therapists and Physical Therapists

[0035] Detention Center Supervisors/Guards and the like

- **[0036]** Emergency response personnel (Police, Medics, Fire fighters, and the like)
- [0037] Coaches (Athletic, academic, and the like)
- [0038] Corporate Supervisors (Executives, Managers, Human Resources, and the like)
- [0039] Military Supervisors and Trainers

[0040] A sixth aspect of the present invention is a Mood Patch apparatus.

[0041] A seventh aspect of the present invention is a Mood Patch apparatus, said apparatus comprising a backing member and a thermotropic material.

[0042] An eighth aspect of the present invention is a Mood Patch apparatus, said apparatus comprising a backing member, a thermotropic material, and an encapsulant.

[0043] A ninth aspect of the present invention is a Mood Patch apparatus, said apparatus comprising a backing member and a thermotropic material and wherein said backing member further comprises an adhesive.

[0044] A tenth aspect of the present invention is a Mood Patch apparatus, said apparatus comprising a backing member, a thermotropic material, and an encapsulant and wherein said backing member further comprises an adhesive.

[0045] An eleventh aspect of the present invention is a Mood Patch apparatus wherein said encapsulant is of a clear plastic.

[0046] A twelfth aspect of the present invention is a Mood Patch apparatus wherein said encapsulant is of a thin glass.

[0047] A thirteenth aspect of the present invention is a Mood Patch apparatus wherein said encapsulant is of a poly-terephthalate (Mylar), preferably of a thickness of 0.001-0. 25" thick, such to remain flexible.

[0048] A fourteenth aspect of the present invention is a Mood Patch apparatus wherein said backing material has a high coefficient of thermal energy (good transfer of temperature).

[0049] A fifteenth aspect of the present invention is a Mood Patch apparatus wherein said backing material is of a thin metal base.

[0050] A sixteenth aspect of the present invention is a Mood Patch apparatus wherein said backing material is of a thin, flexible metal base.

[0051] A seventeenth aspect of the present invention is a Mood Patch apparatus wherein said backing material is of a thin, flexible metal base, such as aluminum foil.

[0052] An eighteenth aspect of the present invention is a Mood Patch apparatus wherein said backing material is of a thin plastic base.

[0053] A nineteenth aspect of the present invention is a Mood Patch apparatus wherein said backing material is of a thin polyterephthalate (Mylar), of a thin silicon, or of a thin urethane.

[0054] A twentieth aspect of the present invention is a Mood Patch apparatus wherein said backing material is of a thin resin based material.

[0055] A twenty-first aspect of the present invention is a Mood Patch apparatus wherein said backing material is of a thin fabric material.

[0056] A twenty-second aspect of the present invention is a Mood Patch apparatus wherein said backing material is of a thin flexible material such as those used for adhesive bandages.

[0057] A twenty-third aspect of the present invention is the utilization of an adhesive applied to the back of said Mood Patch; wherein said adhesive is utilized to couple said Mood Patch to a wearer.

[0058] A twenty-fourth aspect of the present invention is the utilization of a plurality of thermotropic materials, wherein said thermotropic materials operate about slightly offset temperature ranges from each other.

[0059] A twenty-fifth aspect of the present invention is the utilization of a plurality of cholesteric liquid crystal compositions, wherein said cholesteric liquid crystal compositions operate about slightly offset temperature ranges from each other.

[0060] A twenty-sixth aspect of the present invention is the utilization of a plurality of cholesteric liquid crystal compositions, wherein said cholesteric liquid crystal compositions operate about slightly offset temperature ranges from each other, wherein further the cholesteric liquid crystal compositions become clear upon a particular temperature range.

[0061] A twenty-seventh aspect of the present invention is the utilization of a plurality of cholesteric liquid crystal compositions, wherein said cholesteric liquid crystal compositions operate about slightly offset temperature ranges from each other, wherein further the cholesteric liquid crystal compositions become clear upon a particular temperature range, making text located beneath said cholesteric liquid crystal composition visible.

[0062] A twenty-eighth aspect of the present invention is a Mood Patch comprising a plurality of thermotropic materials, wherein said thermotropic materials operate about slightly offset temperature ranges from each other, thus providing an apparatus that presents a "reference state" for the current emotional state of the wearer.

[0063] A twenty-ninth aspect of the present invention is a Mood Patch comprising a plurality of cholesteric liquid crystal compositions, wherein said cholesteric liquid crystal compositions operate about slightly offset temperature ranges "reference state" for the current emotional state of the wearer. [0064] A thirtieth aspect of the present invention is a Mood Patch comprising a plurality of cholesteric liquid crystal compositions, wherein said cholesteric liquid crystal compositions operate about slightly offset temperature ranges from each other, thus providing an apparatus that presents a "reference state" for the current emotional state of the wearer, wherein the offset is within a range less than 1 degree Fahrenheit between adjacent compositions.

[0065] A thirty-first aspect of the present invention is a Mood Patch comprising a plurality of cholesteric liquid crystal compositions, wherein said cholesteric liquid crystal compositions operate about slightly offset temperature ranges from each other and wherein said cholesteric liquid crystal compositions become transparent when exposed to a specific temperature range and opaque when outside that particular temperature range.

[0066] A thirty-second aspect of the present invention is a Mood Patch comprising a plurality of cholesteric liquid crystal compositions, each placed over a text respective to the specific formulation of cholesteric liquid crystal composition, wherein said cholesteric liquid crystal compositions operate about slightly offset temperature ranges from each other and wherein said cholesteric liquid crystal compositions become transparent when exposed to a specific temperature range and opaque when outside that particular temperature range, thus making the respective text visible upon exposure to the specific temperature range.

[0067] A thirty-third aspect of the present invention is a Mood Patch comprising a plurality of cholesteric liquid crystal compositions, wherein said cholesteric liquid crystal compositions operate about slightly offset temperature ranges from each other and wherein said cholesteric liquid crystal compositions become transparent when exposed to a specific temperature range, thus making the respective text visible upon exposure to the specific temperature range; said Mood Patch further comprising a first group of text indicators, a second group of text indicators, and additional groups of text indicators, wherein each group has a respective series of cholesteric liquid crystal compositions is thermally offset from the other by one or more text references.

[0068] A thirty-fourth aspect of the present invention is a method of fabrication, wherein said Mood Patch is fabricated via the following process:

- [0069] a. Locate a section of base material;
- [0070] b. Apply a first thermotropic material layer;
- [0071] c. Apply a second thermotropic material layer, wherein said second thermotropic material has a slightly different thermal property from said first thermotropic material; and
- **[0072]** d. Repeat for each additionally desired thermotropic material layer, wherein said additional thermotropic material has a slightly different thermal property from the other thermotropic material layers.

[0073] A thirty-fifth aspect of the present invention is a method of fabrication, wherein said Mood Patch is fabricated via the following process:

- [0074] a. Locate a section of base material;
- [0075] b. Apply a first thermotropic material layer;

- [0076] c. Apply a second thermotropic material layer, wherein said second thermotropic material has a slightly different thermal property from said first thermotropic material;
- **[0077]** d. Repeat for each additionally desired thermotropic material layer, wherein said additional thermotropic material has a slightly different thermal property from the other thermotropic material layers; and
- **[0078]** e. Cure said thermotropic material between each application.

[0079] A thirty-sixth aspect of the present invention is a method of fabrication, wherein said Mood Patch is fabricated via the following process:

- [0080] a. Locate a section of base material;
- [0081] b. Apply a material dam layer;
- [0082] c. Apply a first thermotropic material layer;
- [0083] d. Apply a second thermotropic material layer, wherein said second thermotropic material has a slightly different thermal property from said first thermotropic material; and
- **[0084]** e. Repeat for each additionally desired thermotropic material layer, wherein said additional thermotropic material has a slightly different thermal property from the other thermotropic material layers.

[0085] A thirty-seventh aspect of the present invention is a method of fabrication, wherein said Mood Patch is fabricated via the following process:

- [0086] a. Locate a section of base material;
- [0087] b. Apply a first thermotropic material layer;
- **[0088]** c. Apply a second thermotropic material layer, wherein said second thermotropic material has a slightly different thermal property from said first thermotropic material:
- **[0089]** d. Repeat for each additionally desired thermotropic material layer, wherein said additional thermotropic material has a slightly different thermal property from the other thermotropic material layers; and

[0090] e. Apply a top encapsulant layer.

[0091] A thirty-eighth aspect of the present invention is a method of fabrication, wherein said Mood Patch is fabricated via the following process:

- [0092] a. Locate a section of base material;
- [0093] b. Apply text for indicating a result of being exposed to a respective temperature;
- [0094] c. Apply a first cholesteric liquid crystal composition;
- [0095] d. Apply a second cholesteric liquid crystal composition, wherein said second cholesteric liquid crystal composition has a slightly different thermal property from said first cholesteric liquid crystal composition; and
- **[0096]** e. Repeat for each additionally desired cholesteric liquid crystal composition layer, wherein said additional cholesteric liquid crystal compositions have a slightly different thermal property from the other cholesteric liquid crystal composition layers.

[0097] A thirty-ninth aspect of the present invention is a method of fabrication, wherein said thermotropic material is applied via a screen-printing process.

[0098] A fortieth aspect of the present invention is a method of fabrication, wherein said thermotropic material is applied via a dispensing process.

[0099] A forty-first aspect of the present invention is a method of fabrication, wherein said thermotropic material is

applied via a dispensing process, placing said thermotropic material within an area defined by a material dam.

[0100] A forty-second aspect of the present invention is a method of fabrication, wherein said damming material is applied via a screen-printing process.

[0101] A forty-third aspect of the present invention is a method of fabrication, wherein said damming material is applied via a dispensing process.

[0102] A forty-fourth aspect of the present invention is a method of fabrication, wherein said dispensing process is automated.

[0103] A forty-fifth aspect of the present invention is a method of fabrication, wherein said screen-printing process is automated.

[0104] A forty-sixth aspect of the present invention is the utilization of said Mood Patch in Research, wherein said mood patch could be utilized as an investigative tool in: studying emotions, alterations in emotional functioning after injuries, variance in emotions based on differential diagnosis, infant/parent interactive communication styles in attachment, etc.

[0105] A forty-seventh aspect of the present invention is the incorporation of a calibration indicator.

[0106] A forty-eighth aspect of the present invention is the incorporation of a calibration indicator, wherein the calibration indicator rotates to indicate a "normal" position.

[0107] A forty-ninth aspect of the present invention is the incorporation of a calibration indicator, wherein the calibration indicator slides to indicate a "normal" position.

[0108] A fiftieth aspect of the present invention is the incorporation of a series of thermal indicators, wherein the series of thermal indicators, each having a functioning temperature of a small temperature delta from the adjacent thermal indicator.

[0109] A fifty-first aspect of the present invention is the incorporation of a series of thermal indicators, wherein the series of thermal indicators, each having a functioning temperature of a small temperature delta from the adjacent thermal indicator, wherein the temperature delta is one of 0.25, 0.5, 0.75, and 1.0 degree Fahrenheit.

[0110] A fifty-second aspect of the present invention is the incorporation of emotional status indicators on a member that moves in conjunction with the calibration member.

[0111] A fifty-third aspect of the present invention is the incorporation of a calibration member that is adhered to a mood indication apparatus.

BRIEF DESCRIPTION OF THE DRAWING

[0112] For the purpose of initially illustrating the invention, the specification presents drawings, flow diagrams, and embodiments that are presently preferred as well as alternates. It should be understood, however, that the invention is not limited to the specific instrumentality and methods disclosed herein. It can be recognized that the figures represent a layout in which persons skilled in the art may make variations therein. In the drawings:

[0113] FIG. 1 presents a currently known mood ring;[0114] FIG. 2 presents a chart for identifying a respective mood of an individual when using one embodiment of said present invention;

[0115] FIG. 3 illustrates representative mood patches respective to said present invention;

[0116] FIG. 4 illustrates layers respective to the fabrication of a mood patch;

[0117] FIG. 5 illustrates a flow diagram representative of a process for utilizing said mood patch for clinically monitoring an individual;

[0118] FIG. 6 illustrates a flow diagram representative of a process for utilizing said mood patch for clinically monitoring and providing action respective to an individual's emotional state;

[0119] FIG. 7 illustrates an alternate embodiment of the present invention, further illustrating the utilization of a plurality of thermotropic materials, having at least two different temperature ranges;

[0120] FIG. 8 illustrates another alternate embodiment of the present invention, further illustrating the utilization of a plurality of thermotropic materials, wherein said thermotropic materials have at least two different temperature ranges, and utilizing a cholesteric liquid crystal composition;

[0121] FIG. 9 illustrates a flow diagram representing a fabrication process for a Mood Patch comprising a plurality of thermotropic materials, wherein said thermotropic materials have at least two different temperature ranges;

[0122] FIG. 10 illustrates a calibratable mood patch in accordance with a first embodiment;

[0123] FIG. 11 illustrates an assembly drawing of said calibratable mood patch in accordance with a first embodiment;

[0124] FIG. 12 illustrates a calibratable mood patch in accordance with a second embodiment; and

[0125] FIG. 13 illustrates a calibratable mood patch in accordance with a third embodiment.

DETAILED DESCRIPTION OF THE DRAWING

[0126] FIG. 1 presents know prior art, commonly referred to as a Mood Ring 10. Said Mood Ring 10 comprises a Mood Ring Frame 12 and a Mood Ring Liquid Crystal Material 14. Said Mood Ring Liquid Crystal Material 14 comprising thermotropic liquid crystals, wherein said thermotropic liquid crystals change color when subjected to subtle changes in temperature. Said Mood Ring Liquid Crystal Material 14 is generally encased in a glass (or similar) encapsulant (not shown). A Mood Ring Cross Section A-A 16 is presented for clarity of the fabrication of said Mood Ring 10. It can be recognized that other materials that change color as subjected to subtle changes in temperature can be utilized for the same resulting feature.

[0127] FIG. 2 presents an example of an emotion Monitoring Color Reference Chart 100. Said Emotion Monitoring Color Reference Chart 100 is respective to the specific thermotropic material selected for the Mood Ring Liquid Crystal Material 14: wherein said thermotropic material presents a resultant color change of the Mood Ring Liquid Crystal Material 14 when subjected to a change in temperature. Said Emotion Monitoring Color Reference Chart 100 is presented based upon properties from a commonly known Mood Ring 10.

[0128] When said Mood Ring Liquid Crystal Material 14 exhibits a Black Color Observed 102 color, the interpretation is considered as an emotional state of stressed, tense, or feeling harried emotion 102a.

[0129] When said Mood Ring Liquid Crystal Material 14 exhibits a Gray Color Observed 104 color, the interpretation is considered as an emotional state of very nervous or very anxious emotion 104a.

[0130] When said Mood Ring Liquid Crystal Material **14** exhibits an amber/Yellow color observed **106** color, the interpretation is considered as an emotional state of a little nervous or anxious emotion **106***a*.

[0131] When said Mood Ring Liquid Crystal Material **14** exhibits a Green color observed **108** color, the interpretation is considered as an emotional state of relaxed, normal, or average emotion **108***a*.

[0132] When said Mood Ring Liquid Crystal Material **14** exhibits a Blue-Green color observed **110** color, the interpretation is considered as an emotional state of somewhat relaxed emotion **110***a*.

[0133] When said Mood Ring Liquid Crystal Material **14** exhibits a Blue color observed **112** color, the interpretation is considered as an emotional state of calm or relaxed emotion **112***a*.

[0134] When said Mood Ring Liquid Crystal Material **14** exhibits a Dark Blue/Navy color observed **114** color, the interpretation is considered as an emotional state of happy, romantic, or passionate emotion **114***a*.

[0135] FIG. 3 illustrates a generically shaped Mood Patch 200 in conjunction with the present invention. Said generically shaped Mood Patch 200 comprising a mood patch backing material 202 and a mood patch thermal sensing material 204. Additionally, a sealing material can be applied over said mood patch thermal sensing material 204. Said generically shaped Mood Patch 200 can alternatively be of any imaginable shape, preferably, of a shape that is desirable to the wearer. Additional examples of alternate shapes shown include a heart shaped mood patch 200a, an oval shaped mood patch 200b, and a star shaped mood patch 200c. Other shapes include square, rectangular, round, triangular, and the like. Additionally, said generically shaped Mood Patch 200 can be in the shape of recognizable objects including cars, trucks, boats, planes, trains, computers, roller-skates, skateboards, surfboards, footballs, basketballs, hockey equipment, shoes, badges, and the like. It is recognized that the shape of the generically shaped Mood Patch 200 can add interest by the user as the user can relate to said shape. Additionally, color can be added around the applied mood patch thermal sensing material 204, wherein said color can reduce the obviousness of the mood patch thermal sensing material 204. Color can be applied as either a single color or multiple colors such as a print to portray an image that is aesthetically pleasing.

[0136] FIG. 4 illustrates the steps of fabricating said generically shaped Mood Patch 200. Said generically shaped Mood Patch 200 would start with a mood patch backing material 202. Said mood patch backing material 202 would be preferably in a sheet or roll of raw material. Said mood patch backing material 202 would comprise a base material, wherein said base material can be metallic (preferably flexible such as aluminum foil), paper, fabric, woven fiber, and the like. It would be desirable such that said mood patch backing material 202 is non-allergenic. It would be desirable such that said mood patch backing material 202 is of a material that "breathes". The mood patch backing material 202 would further comprise an adhesive, said adhesive is placed on a Mood Patch backside 214 of said mood patch backing material 202. Said adhesive can be pre-applied to Mood Patch backside 214 of said mood patch backing material 202 or applied during the fabrication process. Said mood patch thermal sensing material 204 can comprise liquid crystal polymer 210 and liquid crystal encapsulant 212. Said liquid crystal polymer 210 is then applied to a Mood Patch front side 216 by any of many known methods, including dispensing, screening, spraying, and the like. Said liquid crystal polymer 210 is applied and optionally heated for curing; all in conjunction with said material type. Said liquid crystal polymer 210 can comprise thermotropic liquid crystals, cholesteric liquid crystal compositions, and the like. Said liquid crystal encapsulant 212 is applied over said liquid crystal polymer 210 as an encapsulant and protectant layer. The figure illustrates two locations of the layers—a first image showing the layers in distant formation for clarity and a second image shown in dashed lines illustrating the final alignment of the layers upon application. The material applied would be cured in accordance with the material requirements. The preferred embodiment of fabrication would be to apply the various layers to the sheets or rolls of said mood patch backing material 202. An adhesive protection material can be applied over the adhesive material that was applied to said mood patch backing material 202. Artwork can be applied to improve the aesthetics of said generically shaped Mood Patch 200. Once completed, the said generically shaped Mood Patch 200 would be shaped from the sheet or roll of completed units by any of known methods, including singulation, steel rule die, computer controlled cutting, laser singulation, and the like.

[0137] FIG. 5 presents a Mood Patch monitoring flow diagram 300 illustrating the steps of monitoring a mood patch as a means for an individual to monitor another's emotional state as a means to assist in clinical treatment/emotional understanding of another party. Said Mood Patch monitoring flow diagram 300 begins with a step of applying mood patch to an individual 302. Once applied, said generically shaped Mood Patch 200 is subjected to the temperature of a contact area (not shown). Said contact area is defined as the interface between said Mood Patch backside 214 of said generically shaped Mood Patch 200 and the individual where said generically shaped Mood Patch 200 is applied. As the contact area temperature changes the temperature change is transferred to the generically shaped Mood Patch 200. The result is a change is transferred to said mood patch thermal sensing material 204 causing said mood patch thermal sensing material 204 to twist or change position. The resultant change in orientation causes a change in the molecular structure. The change in molecular structure changes the interaction with wavelengths of light resulting in an apparent change in color. The monitoring party accomplishes a step of monitoring mood patch for change in color 304 for identifying when to react to a mood change of the monitored party (individual). While accomplishing said step of monitoring mood patch for change in color 304, the monitoring party accomplishes a step of determining if said mood patch changes to a color considered critical **306**. The monitoring party can use either training, an index, and the like to interpret the presented color of said generically shaped Mood Patch 200. The monitoring party, in accordance with said step of determining if said mood patch changes to a color considered critical 306, determines if the monitored individual's mood should be acted upon in accordance with a step of acting in accordance to mood identified 308. Should the monitoring party determine that the monitored individual's mood is acceptable, the monitoring party proceeds to said step of monitoring mood patch for change in color 304. Should the monitory party determine that the monitored individual's mood is not acceptable, the monitory party proceeds to said step of acting in accordance to mood identified 308. Such action could be anything from asking the monitored individual what they are feeling & sensing internally, what are they thinking, and whatever emotional label they utilize to describe their feelings & thoughts. Once determining the respective mood of the monitored individual, the monitoring party would take appropriate action. Such action can include talking to the individual, segregating the individual from the group, providing medication, and the like. At any point during the flow, the monitoring party can decide in accordance with step of deciding to continue to monitor mood of individual(s) 310, whether to continue monitoring said monitored individual's mood. Should the monitoring party decide to continue monitoring said monitored individual's mood, the process is returned to said step of monitoring mood patch for change in color 304. Should the monitoring party decide to discontinue monitoring said monitored individual's mood, the process proceeds to a step of removing the mood patch 312 and subsequent step of step of concluding the monitoring process 314. It can be recognized that said step of removing the mood patch 312, although courteous and desirable, is not required for concluding the monitoring process. The flow diagram illustrated is representative of the monitoring process and it is understood that the actual process may differ from the details provided herein. The patches are believed to be unique in that actual acting upon a mood indicating patch such as generically shaped Mood Patch 200 in a clinical manner is unique and novel. Although the concept is not claimed by others to be accurate, it is considered sufficient to be utilized as an aide in providing insight to a monitoring party to take initiative in responding to a perceived mood change.

[0138] FIG. 6 presents a Mood Patch Color interpretation flow diagram 400 illustrating the steps of monitoring a mood patch as a means for an individual to monitor another's emotional state as a means to assist in clinical treatment/emotional understanding of another party. It is recognized that the color-coding presented is one that is representative of a specific mood patch thermal sensing material 204 and calibrated respectively. The teachings herein are representative to a specific material and therefore should a differing material be used, the resultant color-coding index would differ respectively. The teachings herein should not be limited to the colors taught herein, but the patches should be considered representative of the concept and material utilized in the embodiment of the reduction to practice of the end user. Said Mood Patch Color interpretation flow diagram 400 initiates with said step of applying mood patch to an individual 302. The monitoring party would accomplish said step of monitoring mood patch for change in color 304, herein describing details of said step of determining if said mood patch changes to a color considered critical 306 of Mood Patch monitoring flow diagram 300 of FIG. 5, as described below. The monitoring party monitors said generically shaped Mood Patch 200 applied to monitored individual(s) for changes in color. The monitoring party reviews the generically shaped Mood Patch 200 against the understood color range to determine if any action is required. Said Mood Patch Color interpretation flow diagram 400 is one embodiment of the present invention being representative of such embodiment. The monitoring party accomplishes a decision step of identifying color as blue, green or combination therein 402. Should the monitoring party determine such decision outcome is "YES", monitoring party then acts according to resultant step-determining blue, green to interpret as relaxed 404. Should the monitoring party determine such decision outcome is "NO", monitoring party then continues to determine the correct color output. The monitoring party accomplishes a decision step of identifying color as black 406. Should the monitoring party determine such decision outcome is "YES", monitoring party then acts according to resultant step-determining black to interpret as stressed 408. Should the monitoring party determine such decision outcome is "NO", monitoring party then continues to determine the correct color output. The monitoring party accomplishes a decision step of identifying color as yellow 410. Should the monitoring party determine such decision outcome is "YES", monitoring party then acts according to resultant step-determining yellow to interpret as nervous/ anxious 412. Should the monitoring party determine such decision outcome is "NO", monitoring party then continues to determine the correct color output. The monitoring party accomplishes a decision step of identifying color as gray 414. Should the monitoring party determine such decision outcome is "YES", monitoring party then acts according to resultant step-determining gray to interpret as very nervous 416. Should the monitoring party determine such decision outcome is "NO", monitoring party then continues to determine the correct color output. Should the monitoring party have processed through all color options or recognize presented color as acceptable or no change, the monitoring party would conclude the color determination step(s) and accomplish said step of deciding to continue to monitor mood of individual(s) 310. The monitoring party can decide in accordance with step of deciding to continue to monitor mood of individual(s) 310, whether to continue monitoring said monitored individual's mood. Should the monitoring party decide to continue monitoring said monitored individual's mood, the process is returned to said step of monitoring mood patch for change in color 304. Should the monitoring party decide to discontinue monitoring said monitored individual's mood, the process proceeds to a step of removing the mood patch 312 and subsequent step of concluding the monitoring process 314. It can be recognized that said step of removing the mood patch 312, although courteous and desirable, is not required for concluding the monitoring process. The flow diagram illustrated is representative of the monitoring process and it is understood that the actual process may differ from the details provided herein. The patches are believed to be unique in that actual acting upon a mood indicating patch such as generically shaped Mood Patch 200 in a clinical manner is unique and novel. Although the concept is not claimed by others to be accurate, it is considered sufficient to be utilized as an aide in providing insight to a monitoring party to take initiative in responding to a perceived mood change. Additionally, the shape of said generically shaped Mood Patch 200 can be in the form of bracelets, necklaces, and other forms of jewelry.

[0139] The following defines potential applications for clinical monitoring using said generically shaped Mood Patch **200**:

[0140] Hospital Applications

- [0141] a. Emergency Rooms
- [0142] b. Pre-op/Operating Rooms/Post Op
- [0143] c. Outpatient Surgery/Recovery Rooms
- [0144] d. Waiting Rooms
- [0145] e. Nurseries
- **[0146]** f. Radiology applications (X-Ray, MRI, CT and the like)
- [0147] g. Lab workup rooms
- [0148] h. Outpatient support centers
- [0149] i. Hospice Care Facilities

7

[0150] Auxiliary/Emergency Applications [0151] a. Police [0152] b. Fire Stations/Rescue Personnel [0153] c. Ambulance [0154] Law Enforcement Centers [0155] a. Interrogation Facilities [0156] b. Jails [0157] c. Juvenile Detention Centers [0158] d. Prisons [0159] e. Courts [0160] Military Applications [0161] a. Interrogation Facilities[0162] b. Training Facilities [0163] Physician's Offices [0164] a. Pediatric [0165] b. Geriatric [0166] c. General [0167] d. Specialists [0168] e. Dental [0169] f. Orthodontic [0170] Mental Health Facilities Applications [0171] a. In-patient [0172] b. Out-patient [0173] c. Group Homes [0174] d. Foster Homes [0175] e. Social Worker's Offices [0176] f. Psychologist's Offices [0177] g. Marital Therapist's Offices [0178] Geriatric Facilities Applications [0179] a. Assisted Living Centers [0180] b. Alzheimer Center [0181] c. Nursing Homes [0182] Athletic Applications [0183] a. Coaches [0184] b. Football Players [0185] c. Basketball Players [0186] d. Baseball Players [0187] e. Hockey Players [0188] f. Soccer Players [0189] g. Swimmers [0190] h. Skaters [0191] i. Runners [0192] j. Tennis Players [0193] k. Golf Players [0194] 1. Volleyball Players [0195] Educational Applications [0196] a. Students [0197] i. Preschool/Early Childhood Education (ECE) [0198] ii. Elementary, Middle and High School [0199] iii. College [0200] iv. Non classroom locations (library, infirmary, and the like) [0201] b. Special Education [0202] i. Learning Disabilities (examples: Dyslexia, Dyscalculia, etc.) [0203] ii. Autistic [0204] iii. Aspergers [0205] iv. Non-verbal learning disabilities [0206] v. Emotionally Disturbed [0207] vi. Brain Injured/Limited [0208] vii. Attention Deficit Disorder

- [0209] viii. Anxiety Disorder
- [0210] c. Hearing Impaired

- [0211] Businesses
 - [0212] a. Executives/Management
 - [0213] b. Airline personal (Air Traffic Controllers, Pilots, Crew, Passengers)
 - [0214] c. Accountants
 - [0215] d. Attorneys

[0216] FIG. 7 illustrates an alternate embodiment of the present invention presenting a multi-thermo chromic compositions mood patch 500 shown in two views: a multi-thermo chromic compositions mood patch top view 500A and a multi-thermo chromic compositions mood patch sectional view 500B. Said multi-thermo chromic compositions mood patch 500 provides an apparatus wherein a monitoring party can establish a baseline and then monitor a direction of change in emotional state of a wearer.

[0217] Said multi-thermo chromic compositions mood patch 500 comprising a multi-thermo chromic compositions mood patch backing material 502, wherein said multi-thermo chromic compositions mood patch backing material 502 is used as the main member of said multi-thermo chromic compositions mood patch 500. A mood patch adhesive 512 is applied to a contacting side 514 of said multi-thermo chromic compositions mood patch 500. Said mood patch adhesive 512 can be of any type of adhesive, preferably one that is similar to adhesive bandage or other medical grade removable adhesive. The adhesive could comprise a removable backing material (not shown) to protect the adhesive prior to use. A plurality of multi-thermo chromic compositions mood patches 500 can be fabricated and presented on a single sheet of removable backing material. Said multi-thermo chromic compositions mood patch 500 can be of any shape, but preferably of a shape to distinguish between each of a plurality of thermotropic material deposits. The illustration presents a single multithermo chromic compositions mood patch 500 comprising three (3) distinct thermotropic material deposits; it is understood that said multi-thermo chromic compositions mood patch 500 could comprise two or more thermotropic material deposits. The illustration presents a low temperature range thermotropic material 506, a mid temperature range thermotropic material 508, and a high temperature thermotropic range material 510. Each of the various thermotropic materials provides a functioning range with a center operating temperature and a respective temperature range; preferably with each center operating temperature and respective temperature range differing from the others. The present invention provides an apparatus for the wearer to establish a "normal" range at the current state of wearer's emotions. The wearer would adhere said multi-thermo chromic compositions mood patch 500 onto the wearer's skin, then determine which of the thermotropic material deposits would be considered at a "normal" indication by the color coding or visible text notation (as shown in FIG. 8). A person would utilize said multi-thermo chromic compositions mood patch 500 to monitor the emotional state of a wearer. The monitoring party would determine which of the plurality of thermotropic material deposits should be established and utilized as the optimal monitoring deposit. Further included is an optional damming material 504. Said optional damming material 504 would be applied to said multi-thermo chromic compositions mood patch backing material 502 providing a barrier between each of the plurality of thermotropic material deposits. Said damming material 504 would aid in a dispensing application of said thermotropic material deposits. Sectional view shows a gap between said damming material 504 and each of the plurality of thermotropic material deposits for clarity purposes; wherein during actual reduction to practice it is more likely that the gap would not exist. This would be a function of the fabrication process. Further noted, said mood patch adhesive **512** may be applied to said multi-thermo chromic compositions mood patch backing material **502** in a pattern, leaving the area of said multi-thermo chromic compositions mood patch backing material **502** comprising said thermotropic material deposits clear of said mood patch adhesive **512**. Although the image illustrated is a series of circular shapes, it is recognized that other shapes can be utilized for said multi-thermo chromic compositions mood patch **500**.

[0218] FIG. **8** illustrates another alternate embodiment of the present invention, illustrating a multi-thermo chromic compositions readable mood patch **550**, wherein said multi-thermo chromic compositions readable mood patch **550** utilizes a plurality of cholesteric liquid crystal compositions. Said cholesteric liquid crystal compositions are designed to become translucent upon exposure to a specific temperature range, thus exposing text printed below said cholesteric liquid crystal compositions. Said multi-thermo chromic compositions. Said multi-thermo chromic compositions readable mood patch **550** would comprise a plurality of cholesteric liquid crystal compositions, each becoming translucent upon a different temperature range for a plurality of human intelligible indicators. Such indicators are preferably readable text **552**, illustrated as visible text **552**A and hidden text **552**B.

[0219] Said multi-thermo chromic compositions readable mood patch 550 comprising said multi-thermo chromic compositions mood patch backing material 502, wherein said multi-thermo chromic compositions mood patch backing material 502 provides the base for said multi-thermo chromic compositions readable mood patch 550. Said mood patch adhesive 512 is applied to said contacting side 514 of said multi-thermo chromic compositions readable mood patch 550 in the same manner as described above. A printed indicator such as readable text 552, illustrated as visible text 552A and hidden text 552B are applied to said multi-thermo chromic compositions mood patch backing material 502 via a printing process. It is preferable that a plurality of readable text 552 images are utilized to provide the variety of emotions that can be interpreted by said multi-thermo chromic compositions readable mood patch 550. Each emotion can be related to a respective skin temperature range. To calibrate said multi-thermo chromic compositions readable mood patch 550, one can provide a plurality of readable text 552 images, wherein said readable text 552 images are covered with a plurality of cholesteric liquid crystal compositions. Each cholesteric liquid crystal composition is designed to become translucent upon being exposed to a specific temperature. Said cholesteric liquid crystal compositions are presented as a thermal material range A 554, thermal material range B 556,thermal material range C 558, thermal material range D 560, thermal material range E 562, thermal material range F 564, and thermal material range G 566, wherein said thermal material range A 554 would be representative of the coolest functioning temperature range and thermal material range G 566 would be representative of the warmest functioning temperature range. It is noted that the same material: thermal material range C 558, thermal material range D 560, and thermal material range E 562 are applied to two (2) locations, but offset respective to the indicator. The monitoring party would view said multi-thermo chromic compositions readable mood patch 550 and determine which of the series of human intelligible indicators indicates a Normal status for the wearer. Upon determination of the "calibrated" series, the monitoring party would continue to monitor said selected series for changes in emotion of the wearer. As the wearer's body surface temperature changes, the previously translucent cholesteric liquid crystal composition would become opaque, hiding the respective indicator and a different cholesteric liquid crystal composition would become translucent exposing a different indicator. The monitoring party can monitor the direction and degree of emotional change of the wearer without relying on communication from the wearer. Although the image illustrated is a rectangle, it is recognized that other shapes can be utilized for said multi-thermo chromic compositions readable mood patch **550**.

[0220] FIG. 9 illustrates a flow diagram representing a multi-thermo chromic compositions mood patch fabrication process 600 presenting the steps for fabricating a multithermo chromic compositions mood patch 500 comprising a plurality of thermotropic materials. For the fabrication of a multi-thermo chromic compositions mood patch 500 using a translucent type of cholesteric liquid crystal composition, one would apply human intelligible indicators such as indicator text 552 is applied to said viewing side 516 in accordance with an optional indicator application step 602. This can be completed using any known printing process, including screening, printing, tampo-transfer, and the like. An optional damming material 504 is then applied in a desired pattern to said viewing side 516 in accordance with an optional damming material application step 604. Said optional damming material 504 is preferably of a flexible material such as a rubber, flexible plastic, silicon, and the like. Said optional damming material 504 can be applied via a printing process, a dispensing process, a transfer process and the like. Thermotropic material is then applied in a series of application/curing steps. A first thermotropic material composition is applied in accordance with a first thermotropic material application step 606. Said first thermotropic material composition is then cured in accordance with the manufacturers directions. A next thermotropic material composition is applied in accordance with a next thermotropic material application step 608. Said next thermotropic material composition is then cured in accordance with the manufacturers directions. Said next thermotropic material application step 608 is repeated for the remaining thermotropic material compositions. An optional sealant layer is applied over the multiple thermotropic material composition deposits in accordance with an optional encapsulant layer application step 610. Mood patch adhesive 512 is applied to said contacting side 514 of said multi-thermo chromic compositions mood patch backing material 502 in accordance with an adhesive application step 612. Said mood patch adhesive 512 can be applied covering the complete contacting side 514 or a portion of the contacting side 514, preferably in a pattern respective to the pattern of thermotropic material deposits. Said multi-thermo chromic compositions mood patch 500 is then singulated in accordance with a mood patch singulation step 614. Said mood patch singulation step 614 can be accomplished via any singulation method, including steel rule die, laser cutting, programmable shears, and the like. Said multi-thermo chromic compositions mood patch fabrication process 600 concludes with a multithermo chromic compositions mood patch fabrication completion step 616. An alternate process would be to apply said thermotropic material deposits to said encapsulation, then apply said multi-thermo chromic compositions mood patch backing material **502**, then apply said mood patch adhesive **512**.

[0221] FIG. 10 illustrates a top view and a sectional view of a calibratable mood identifying apparatus 600. Said calibratable mood identifying apparatus 600 comprising the general components of said multi-thermo chromic compositions mood patch 500 and said multi-thermo chromic compositions readable mood patch 550 arranged in a configuration providing a member for calibrating said calibratable mood identifying apparatus 600. Said calibratable mood identifying apparatus 600A illustrates a top view of said calibratable mood identifying apparatus 600, presenting a calibration indicator 622. Said calibration indicator 622 comprising a calibration dial hub 616, wherein said calibration dial hub 616 provides a means for coupling said calibration indicator 622 to an assembly via a calibration dial coupling member 618. Said calibration indicator 622 would be coupled to a mood status calibration dial 614, wherein said mood status calibration dial 614 rotates in conjunction with a calibration dial rotation 615 of said calibration indicator 622. The user would apply said calibratable mood identifying apparatus 600 to the skin of a wearing party, preferably on the wearing party's hand or arm. Since each section of said wearing party's body has a different temperature, said calibratable mood identifying apparatus 600 provides a means for calibrating the device by adjusting said calibration indicator 622 into a position which references the current state of the wearing party. A series of mood indicators (Happy, Relaxed, Nervous, Tense, and the like) are printed upon said mood status calibration dial 614. Said mood indicators rotate into a calibrated position respective to each of a various thermal material 605. Said thermal material 605 would be comparable to said mood patch thermal sensing material 204 presented earlier. Said thermal material 605 is a generic term, wherein said calibratable mood identifying apparatus 600 comprising a plurality of said thermal material 605; each having a slightly different functional temperature as follows:

- [0222] a. neutral temperature thermal material deposit 630
- [0223] b. neutral temperature plus x thermal material deposit 632
- [0224] c. neutral temperature plus 2× thermal material deposit 634
- [0225] d. neutral temperature plus 3× thermal material deposit 636
- [0226] e. neutral temperature plus 4× thermal material deposit 638
- [0227] f. neutral temperature minus x thermal material deposit 640
- [0228] g. neutral temperature minus 2× thermal material deposit 642
- [0229] h. neutral temperature minus 3× thermal material deposit 644
- [0230] i. neutral temperature minus 4× thermal material deposit 646

[0231] Said neutral temperature would be preferably a midpoint of the temperature range of all said thermal material **605**. "X" would be a temperature delta such as 0.25, 0.50, 0.75, 1.0 degrees Fahrenheit. Each thermal material deposit would be a multiple of said temperature delta as indicated in the above list. I.e. 2× would be two (2) times the temperature delta.

[0232] Said calibratable mood identifying apparatus 600B is a cross sectional view of said calibratable mood identifying apparatus 600. Said calibration dial coupling member 618 rotationally assembles said calibration indicator 622 and respective said mood status calibration dial 614 to a functional section of said calibratable mood identifying apparatus 600. Said calibratable mood patch base material 602 provides the primary framework for said calibratable mood identifying apparatus 600. an adhesive material 604 is coupled to a calibratable mood identifying apparatus contacting side 606 of said calibratable mood patch base material 602, wherein said adhesive material 604 provides an adhesion which removably couples said calibratable mood identifying apparatus 600 to a wearing party. It is desirable that said adhesive material 604 is non-allergenic. Optionally, a optional printed image 608 can be applied to said calibratable mood patch base material 602, wherein said optional printed image 608 becomes visible upon thermal activation of said thermal material 605. An optional damming material 610 is applied to a calibratable mood identifying apparatus identification side 612 of said calibratable mood patch base material 602. Said thermal material 605 would be applied within a thermal material dam reservoir (thermal material dam reservoir 611 of FIG. 11). A mood apparatus clear overlay 620 is a clear laminate and would be assembled providing an external surface above said optional damming material 610 and said thermal material 605. Said functional section would comprising the components between said adhesive material 604 and said mood apparatus clear overlay 620.

[0233] FIG. 11 illustrates an isometric assembly view of said calibratable mood identifying apparatus 600 as a calibratable mood identifying apparatus 600C. A coupling member receiving aperture 619 would be incorporated into each of said calibration dial hub 616, mood apparatus clear overlay 620, calibratable mood patch base material 602, and adhesive material 604. Additionally introduced is an adhesive backing material 603, wherein said adhesive backing material 603 is provided to protect the adhesive of said adhesive material 604 until said calibratable mood identifying apparatus 600 is placed onto the wearing party. The illustration provides an alternate view, providing more detail of the relations between each of said optional damming material 610, thermal material dam reservoir 611 and said thermal material 605. Said mood apparatus clear overlay 620 would be a transparent material placed on the top of the functional section of said calibratable mood identifying apparatus 600. Said mood status calibration dial 614/calibration indicator 622 assembly could be of a thin, flexible plastic material. Said optional damming material 610 can be applied via a laminate process, printing process, and the like. Said thermal material 605 can be applied via a dispensing process, printing process, and the like. It would be preferable that said calibratable mood patch base material 602 be provided with said adhesive material 604 and said adhesive backing material 603 as a single, raw material. Said coupling member receiving aperture 619 would be punched through the functional section assembly. This step can be incorporated into the singulation step presented later herein. Said calibration assembly would be fabricated by printing information on the raw material, then cutting said calibration assembly to shape such as by using a steel rule die. The units would be assembled in an array and then singulated. Said calibration assembly is assembled to said functional section Although said calibratable mood identifying apparatus 600 is shown as having a circular shape, it can be recognized that the

outline can be in any shape, such as those described previously herein. Additionally, said calibratable mood patch base material **602** or said optional damming material **610** can incorporate artwork (not shown), wherein said artwork would compliment the shape of the object. One such example would be an outline of a Dinosaur, wherein said artwork would comprise features of said Dinosaur.

[0234] FIG. **12** illustrates an alternate embodiment of said calibratable mood identifying apparatus **600**, wherein said embodiment comprises two sets of mood indicators. Said calibratable mood identifying apparatus **600** would be fabricated with a plurality of complete calibratable mood indication sections. This provides the user with the ability to further improve the calibration of said calibratable mood identifying apparatus **600**. The wearer would apply said calibratable mood identifying apparatus **600** to the wearer's body, then set the calibration dial. By incorporating a plurality of calibratable mood identifying apparatus **600** and take into considerations any slight variations in temperature over the contact area of said calibratable mood identifying apparatus **600**.

[0235] FIG. 13 illustrates a slidable calibratable mood identifying apparatus 650, wherein said slidable calibratable mood identifying apparatus 650 provides the same overall concept of said calibratable mood identifying apparatus 600, yet in a different embodiment. Said slidable calibratable mood identifying apparatus 650 incorporates a calibrating mood status indication slide bar member 652, wherein said calibrating mood status indication slide bar member 652 slides to provide a calibration means for said slidable calibratable mood identifying apparatus 650, as compared to said calibration indicator 622 of said calibratable mood identifying apparatus 600 which provides calibration via a rotation. Said calibrating mood status indication slide bar member 652 would be slideably coupled to said functional section via at least one slide bar indicator coupling member 654 providing a slide bar calibration slide motion 656. Said slide bar indicator coupling member 654 could be a pair of slits in said mood apparatus clear overlay 620 wherein said slide bar indicator coupling member 654 would be slidably oriented as illustrated. With said mood apparatus clear overlay 620 being preferably transparent, said slide bar indicator coupling member 654 would not impact the readability of any of the markings placed onto said calibrating mood status indication slide bar member 652. The user would remove said adhesive material 604 from said slidable calibratable mood identifying apparatus 650 and adhesively couple said slidable calibratable mood identifying apparatus 650 to the wearer, preferably near the wearer's appendages. Once adhesively coupled, said thermal material 605 would adjust in accordance with the contacting temperature and respective operating temperature for each unique deposition. The respective said thermal material 605 would change color. The user would then slideably adjust said calibrating mood status indication slide bar member 652 to align a slide calibration indicator 660 to the respective said thermal material 605 which became activated by the respective temperature of the wearer's skin. As the temperature of the wearer's skin changes, the respective thermal material 605 would change status respectively, as each of the plurality of thermal material 605 is of a different activation temperature chemistry. As the activation of said thermal material 605 move towards the left as shown, the wearer is becoming more tense; as the activation of said thermal material **605** move towards the right as shown, the wearer is becoming more relaxed. The illustration further presents a cross sectional view of said slidable calibratable mood identifying apparatus **650** as said slidable calibratable mood identifying apparatus **650**B.

[0236] The Applicants have provided a method and apparatus, with several options, for creating and using mood patch (s). Although the apparatus and methods taught herein are the preferred and alternate embodiments, it can be recognized that other form factors, materials, and methods of achieving the same results can be contrived from the disclosed teachings.

What is claimed is:

- 1. A mood patch, said mood patch comprising:
- a flexible, mood patch base material;
- a mood patch adhesive applied to a contact side of said mood patch base material;
- a plurality of thermo chromic material deposits applied to a viewing side of said mood patch base material, wherein said thermo chromic material deposits comprising a composition which changes appearance in accordance with an activation temperature;
- a movable emotion status indicator which is moveably coupled to said mood patch; and
- wherein said movable emotion status indicator provides a reference which identifies a person's mood via a change in appearance of said thermo chromic material.

2. The mood patch of claim 1, wherein at least one of said thermo chromic material deposits has a first activation temperature and at least a second of said thermo chromic material deposits has a second activation temperature, wherein said first activation temperature differs from said second activation temperature.

3. The mood patch of claim **1**, wherein said movable emotion status indicator is positioned via a rotational motion.

4. The mood patch of claim 1, wherein said movable emotion status indicator is positioned via a sliding motion.

5. The mood patch of claim **1**, wherein said movable emotion status indicator comprising a calibration indication, an indication of increasing tension, and an indication of increasing relaxation.

6. The mood patch of claim **1**, comprising at least five thermo chromic material deposits, wherein each of the five thermo chromic material deposits having a different activation temperature.

7. The mood patch of claim 1, comprising at least five thermo chromic material deposits, wherein each of the five thermo chromic material deposits having a different activation temperature,

- said thermo chromic material deposits are arranged in the order of activation temperature by at least one of increasing and decreasing activation temperature.
- 8. A mood patch, said mood patch comprising:
- a mood patch base material;
- a plurality of thermo chromic material deposits applied to a viewing side of said mood patch base material, wherein said thermo chromic material deposits comprising a composition which change in appearance in accordance with an activation temperature;
- a mood status indication dial which is rotationally coupled to said mood patch; and
- wherein said mood status indication dial provides a reference which identifies a person's mood via a change in appearance of said thermo chromic material.

9. The mood patch of claim 8, said mood patch further comprising a mood patch adhesive applied to a contact side of said mood patch backing material;

10. The mood patch of claim 8, wherein at least one of said thermo chromic material deposits has a first activation temperature and at least a second of said thermo chromic material deposits has a second activation temperature, wherein said first activation temperature differs from said second activation temperature.

11. The mood patch of claim 8, wherein said mood status indication dial comprising a calibration indication, an indication of increasing tension, and an indication of increasing relaxation.

12. The mood patch of claim **8**, comprising at least five thermo chromic material deposits, wherein each of the five thermo chromic material deposits having a different activation temperature.

13. The mood patch of claim 12, wherein said mood status indication dial comprising a calibration indication, an indication of increasing tension, and an indication of increasing relaxation.

14. A mood patch, said mood patch comprising:

- a mood patch base material;
- a plurality of thermo chromic material deposits applied to a viewing side of said mood patch base material, wherein said thermo chromic material deposits comprising a composition which change in appearance in accordance with an activation temperature;
- a mood status indication slide bar which is slideably coupled to said mood patch; and

wherein said mood status indication slide bar provides a reference which identifies a person's mood via a change in appearance of said thermo chromic material.

15. The mood patch of claim **14**, said mood patch further comprising a mood patch adhesive applied to a contact side of said mood patch backing material.

16. The mood patch of claim 14, wherein at least one of said thermo chromic material deposits has a first activation temperature and at least a second of said thermo chromic material deposits has a second activation temperature, wherein said first activation temperature differs from said second activation temperature.

17. The mood patch of claim 14, wherein said mood status indication slide bar comprising a calibration indication, an indication of increasing tension, and an indication of increasing relaxation.

18. The mood patch of claim **17**, said mood patch further comprising a mood patch adhesive applied to a contact side of said mood patch backing material.

19. The mood patch of claim **14**, comprising at least five thermo chromic material deposits, wherein each of the five thermo chromic material deposits having a different activation temperature.

20. The mood patch of claim **19**, wherein said mood status indication dial comprising a calibration indication, an indication of increasing tension, and an indication of increasing relaxation.

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