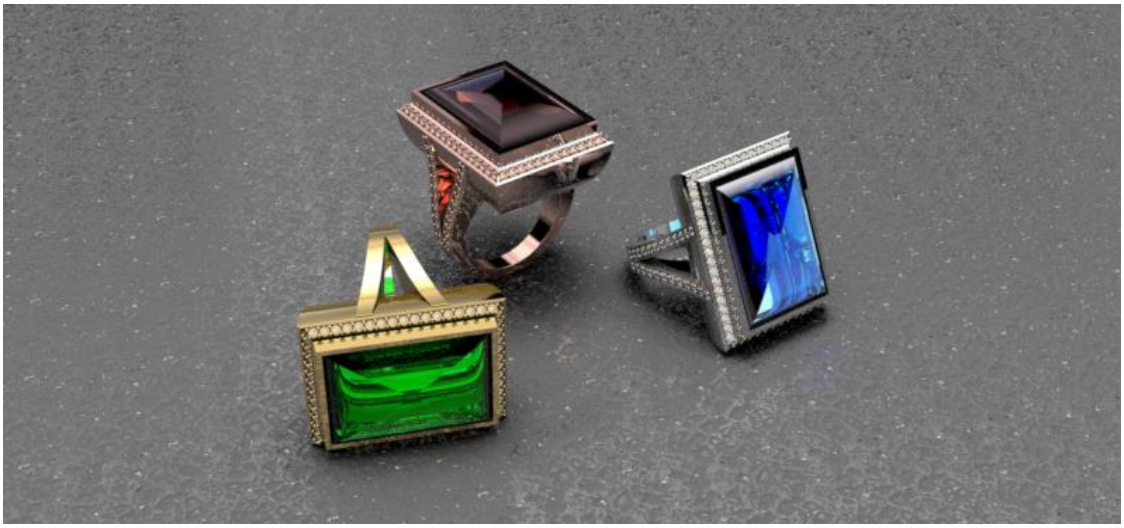
Mood Sensing Sharing Device (MSSD)



- An innovative, category defining wearable device which allows a wearer's emotional state to be conveyed over a communications network* via an ecosystem of emotive apps
  - Enables richer, more nuanced social interactions that are unconstrained by distance
  - Feeds an ecosystem of new emotive apps, which are responsive to mood data being produced by the wearer of the device
  - Exports emotive data to enhance existing applications as well

* The invention is formally described in the "System and Method for a Novelty Mood Sensing Sharing Device," Patent Application No. 14/499,159, September 27, 2014 with priority from provisional application No. 61/998,530, July 1, 2014. Patent allowance granted on March 30, 2015 ('159 Patent).

MSSD Jewelry

- Mood Sensing Sharing Devices (MSSDs) combine the iconic, 1970's mood stone with today's wireless, sensor and mobile apps technology

- MSSDs are placed in the setting of all types of jewelry, including rings, earrings, bracelets, pendants, etc.
  - A first line of high-end luxury pieces is being offered under the Emotion Mood Sharing Jewelry brand

- Changes in mood stone color are believed to indicate changes in emotional state, e.g.,
  - Dark blue corresponds to a happy state
  - Green signifies a neutral emotional state
  - Red means stressed

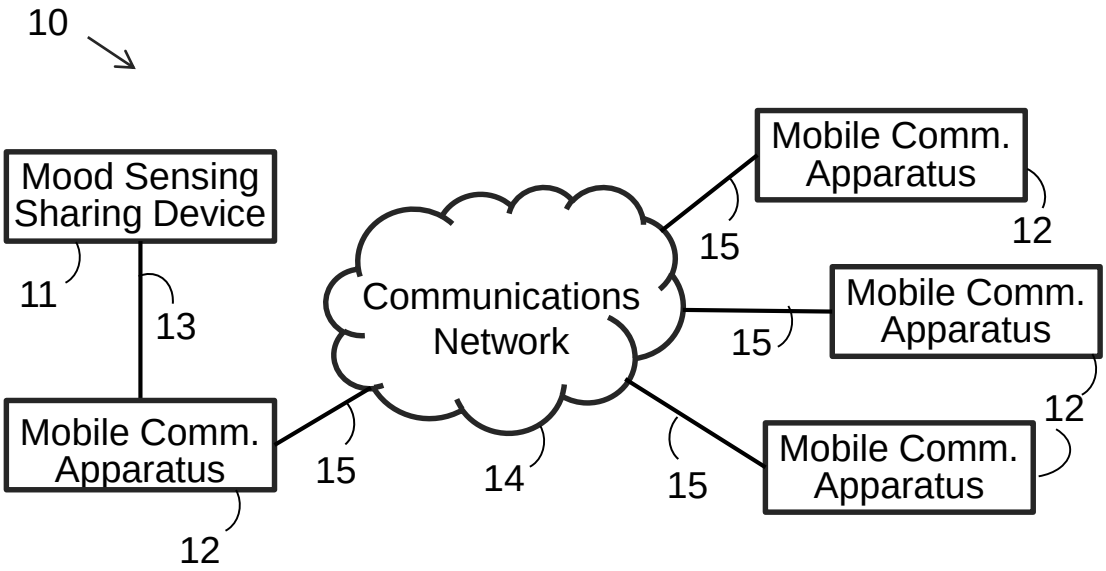
MSSD Apps

- Emotive apps are a new category of software, which track, respond and / or adapt to mood data from a user's MSSD
- Example emotive apps include:
  - Mobile games which dynamically adjust the difficulty level based on imported MSSD mood data
  - Music players which change the playlist order based on an MSSD wearer's mood
  - Dating apps which tell if a prospective partner is in the mood for a connection

Mood Tracker™ App

- ✓ Visually tracks a wearer's mood
- ✓ Enables the recognition of mood changes over time
- ✓ Allows events and moods to be correlated

Mood Sensing Sharing System
(‘159 Patent Figure 1)



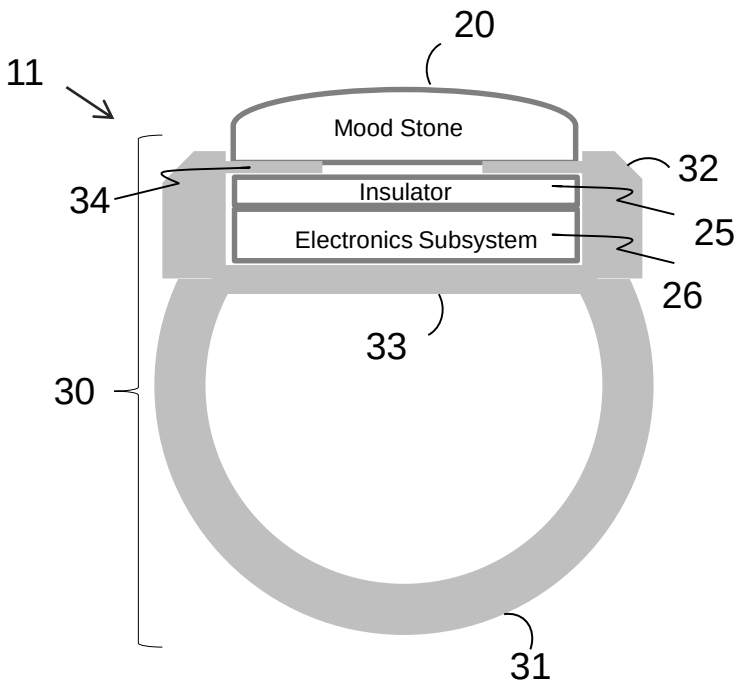
10	Mood Sensing Sharing System
11	Mood Sensing Sharing Device
12	Mobile Communications Apparatus (e.g., smart phone)
13	Communications Connection (e.g., Bluetooth Low Energy v4.0)
14	Communications Network (e.g., Internet)
15	Communications Connection (e.g., Wi-Fi 802.11b Wireless LAN specification)

FIG. 1 is a block level diagram of a mood sensing sharing system **10** constructed in accordance with the present invention. A mood sensing sharing device **11** is in communication with a mobile communications apparatus **12** via a communications connection **13**.

Mobile communications apparatus **12** communicates with other mobile communications apparatus **12** by means of communications connection **15** and communications network **14**.

A mood sensing sharing device **11** comprises novel electronics and software which enables the sharing of an incorporated mood stone’s color (indicative of emotion) over a communications connection **13**.

Mood Sensing Sharing Ring ('159 Patent Figure 3)



11	Mood Sensing Sharing Device
20	Mood Stone
25	Insulator (e.g., rubber)
26	Electronics Subsystem
30	Mood Sensing Sharing Ring
31	Band
32	Setting
33	Under Bezel
34	Heat Conducting Material (e.g., aluminum)

FIG. 3 is a vertical cross section view of a mood sensing sharing device **11,** constructed in accordance with the present invention, in the setting **32** of a mood sensing sharing ring **30**.

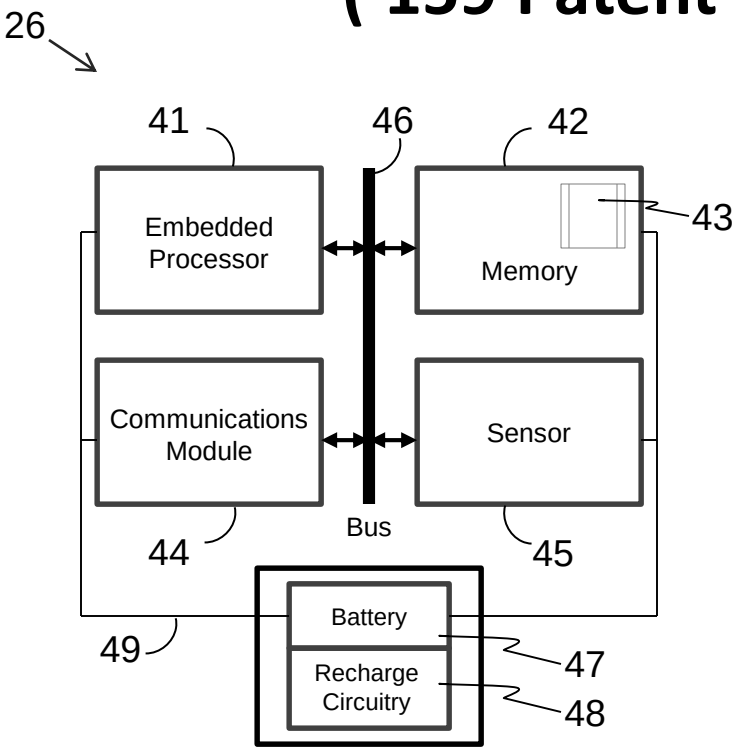
A mood sensing sharing ring **30** comprises a band **31**, a setting **32**, an under bezel **33**, a mood stone **20,** a heat conducting material **34**, an insulator **25** and an electronics subsystem **26**.

The mood stone **20** is a decorative cholesteric stone as taught by U.S. Pat. No. 3,802,945. The mood stone **20** is in thermal contact with the setting **32**, the band **31** or both, by means of heat conducting material **34**.

The band **31,** setting **32,** and heat conducting material **34** are comprised of silver, aluminum, stainless steel or some other heat conductive material, which is suitable for jewelry.

The electronics subsystem **21** enables an indication of the color being displayed on the mood stone **20** to be shared over a communications channel **13**.

Electronics Subsystem ('159 Patent Figure 4)



26	Electronics Subsystem
41	Embedded Processor
42	Memory (e.g., Flash Memory)
43	Sensor Service Routine
44	Communications Module (e.g, Bluetooth Low Energy--BLE)
45	Sensor (e.g., digital thermometer)
46	Local Processor Bus
47	Energy Storage Device (e.g., button cell)
48	Recharge Circuitry
49	Power Distribution Bus

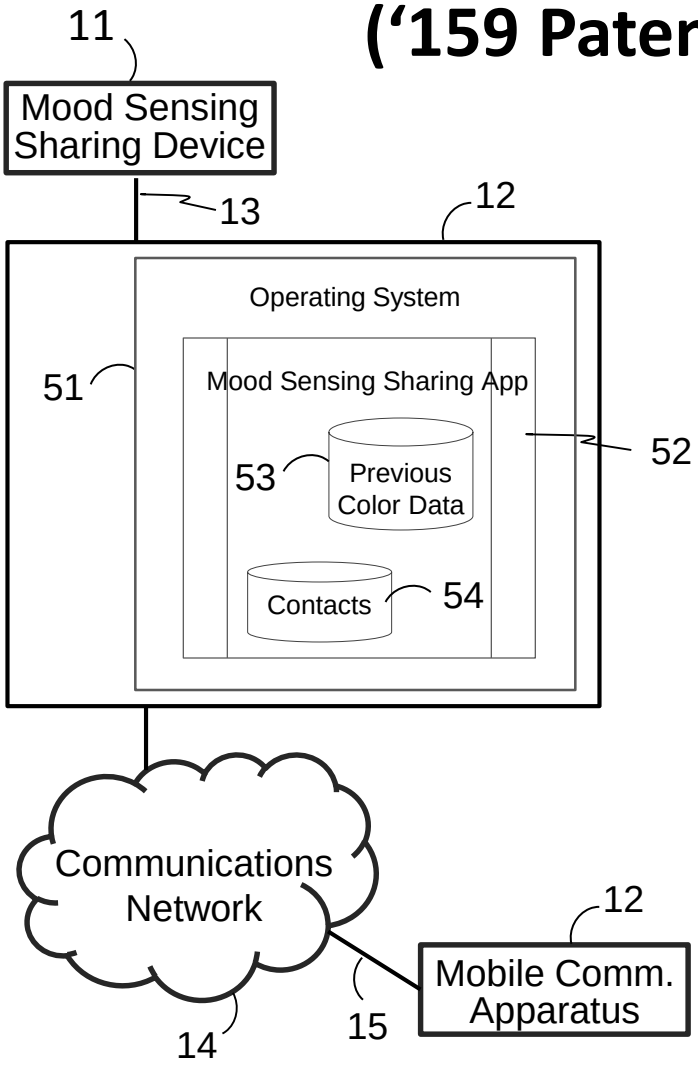
FIG. 4 is a block diagram of an embodiment of the electronics subsystem **26** of a mood sensing sharing device **11**.

An electronics subsystem **26**, of a mood sensing sharing device **11**, comprises an embedded processor **41**, memory **42**, a sensor service routine **43**, a communications module **44,** a sensor **45**, a local processor bus **46,** a energy storage device **47,** recharge circuitry **48**, and a power distribution bus **49**.

In the preferred embodiment of the electronics subsystem **26**, components therein are implemented as a mixed signal system-on-a-chip (SoC), comprising a single chip substrate, as an application specific integrated circuit (ASIC) utilizing a 65nm technology process.

In other embodiments of the electronics subsystem **26**, components therein are implemented in a system-in-a-package (SiP), comprising multiple chips in a chip carrier, as an ASIC or field programmable gate array (FPGA), implemented using a 65nm or other size technology process.

Mood Sensing Sharing Apps ('159 Patent Figure 5)



10	Mood Sensing Sharing System
11	Mood Sensing Sharing Device (e.g., MSS Ring)
12	Mobile Communications Apparatus (e.g., PC)
13	Communications Connection (e.g., BLE v4.0)
14	Communications Network (e.g., Internet)
15	Communications Connection (e.g., Wi-Fi)
51	Mobile Operating System (e.g., Android L)
52	Mood Sensing Sharing Application
53	Previous Color Data
54	Sharing Contacts List

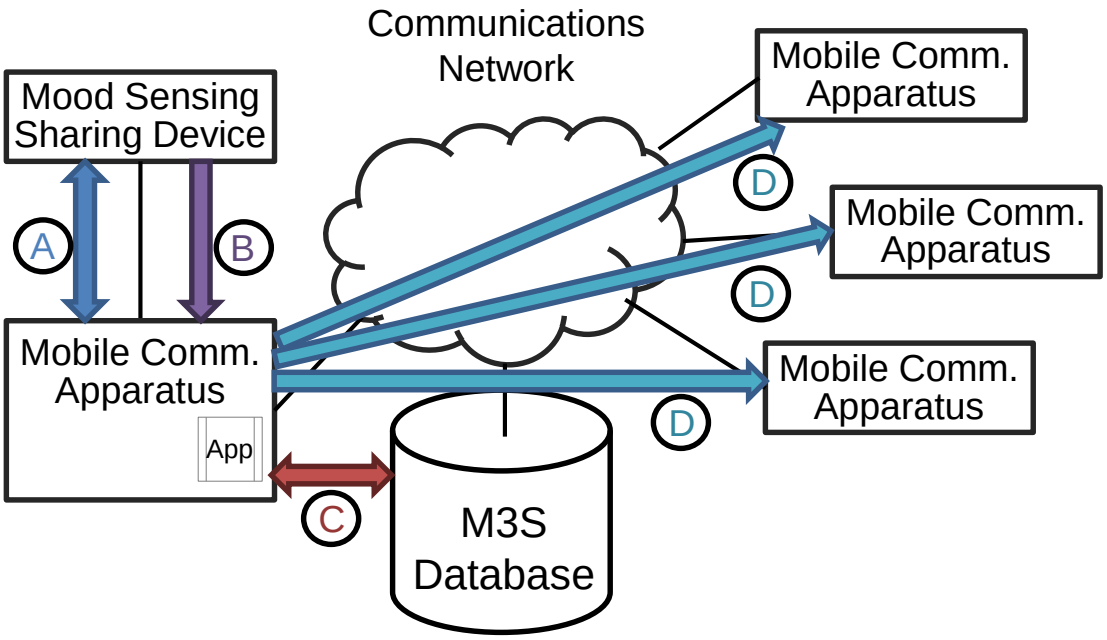
FIG. 5 illustrates the operating environment and major data structures for a mood sensing sharing application **52** of a mobile communications apparatus **12** in a mood sensing sharing system **10**.

A mood sensing sharing application **52** is custom software which enables a mobile communications apparatus **12** to pair with a mood sensing sharing device **11**, in order to receive color information for a mood stone **20** of the paired mood sensing sharing device **11**.

In one embodiment, a mood sensing sharing application additionally enables the sharing of a mood stone's **20** color, of a paired mood sensing sharing device **11,** with other mobile communications apparatuses **12** via a communications network **14**.

Many different apps are envisioned (e.g., emotive texting).

Example APP Communication



- (A) BLE pairing between MSSD and MCA
- (B) MSSD sends sensor indication to App on MCA
- (C) App queries M3S DB for indication-to-color mapping
- (D) App sends emotive data to MCA contacts (i.e., other App instances)