US 7,003,357 to Kreikemeier

1.0 A remote user interface for reading the status of and controlling irrigation equipment, comprising:

1.1 a hand-held display;

1.2 a processor;

1.3 wireless telemetry means for transmitting signals and data between the remote user interface and the irrigation equipment; and

1.4 software operable on said processor for:

(a) displaying data received from the irrigation equipment as a plurality of GUIs that are configured to present said data as status information on said display;

(b) receiving a user's commands to control the irrigation equipment, through said user's manipulation of said GUIs; and

(c) transmitting signals to the irrigation equipment to control the irrigation equipment in accordance with said user's commands.

2. The remote user interface of claim 1 wherein said wireless telemetry means is comprised of a cellular telephone.

3. The remote user interface of claim 1 wherein said wireless telemetry means is comprised of a digital telephone.

4. The remote user interface of claim 1 wherein said wireless telemetry means is comprised of a spread spectrum radio.

5. The remote user interface of claim 1 wherein said wireless telemetry means is comprised of a VHF/UHF radio.

6. The remote user interface of claim 1 wherein said software is further operative on said processor for displaying said irrigation equipment status information as a plurality of GUIs that are shaped to identify particular types of irrigation equipment.

7. The remote user interface of claim 6 wherein said plurality of GUIs [are *sic*] selectively displayed on a single screen on said display.

8. The remote user interface of claim 6 wherein said plurality of GUIs [are *sic*] selectively displayed on a plurality of individual screens.

9. The remote user interface of claim 8 wherein said plurality of individual screens [are *sic*] interlinked with one another to allow a user to navigate between and selectively display the same.

10. The remote user interface of claim 6 wherein said plurality of GUIs [are *sic*] shaped to identify operating irrigation patterns for specific irrigation equipment.

11. The remote user interface of claim 10 wherein said software is further operative on said processor to change the shape of said plurality of GUIs change in response to a change in the status of the irrigation equipment.

12. The remote user interface of claim 6 wherein said plurality of GUIs [are *sic*] color-coded to identify specific irrigation equipment status information.

13. The remote user interface of claim 12 wherein said software is further operative on said processor to change the color of said plurality of GUIs change in response to a change in the status of the irrigation equipment.

14. The remote user interface of claim 1 wherein said software is further operative on said processor to execute one or more programs comprising a plurality of user defined irrigation control commands.

15. The remote user interface of claim 1 wherein said software is further operative on said processor to monitor the operational status of said irrigation equipment and warn a user when said operational status does not fall within a previously defined operational status range.

17.0 The method of remotely determining the status of and controlling irrigation equipment, comprising the steps of:

17.1 providing a single handheld RUI comprising a display and wireless telemetry means for receiving and transmitting data between the remote user interface and the irrigation equipment;

17.2 displaying graphic user interfaces on said RUI to enable a user to determine the status of the irrigation equipment; and

17.3 manipulating said graphic user interfaces to directly control the operation of the irrigation components and ancillary equipment.

18.0 A remote user interface for reading the status of and controlling irrigation equipment, comprising:

18.1 a hand-held display;

18.2 a processor;

18.3 wireless telemetry means for transmitting signals and data between the remote user interface and the irrigation equipment; and

18.4 software operable on said processor for:

(a) displaying data received from the irrigation equipment as a plurality of GUIs that are configured to present said data as status information on said display *and shaped to identify particular types of irrigation equipment*;[1]

(b) receiving a user's commands to control the irrigation equipment, through said user's manipulation of said GUIs *to change the appearance of said GUIs so that said GUIs portray specific operational characteristics of the irrigation equipment represented by said GUIs*;[2] and

(c) transmitting signals to the irrigation equipment to control the irrigation equipment in accordance with said users commands.

[1] Not in Claim 1
[2] Not in Claim 1

Constructions

Term	Construction
directly	with no intermediary
wireless telemetry means	**Function – 1 & 18:** transmitting signals and data between the remote user interface and the irrigation equipment **Function – 17** receiving and transmitting data between the remote user interface and the irrigation equipment **Structure:** a cellular telephone, a digital telephone, a VHF/UHF radio, or a spread spectrum radio, and equivalent structures