

EXHIBIT 19



File 102-920

RECEIVED
STANDARD AMENDMENT UNDER 37 C.F.R. § 1.111
GROUP 260

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
Fabrice Florin et al.)
Serial No.: 08/081,931)
Filing Date: June 22, 1993)
For: AN AUDIO-VISUAL SYSTEM FOR)
SELECTIVELY VIEWING AND)
INTERACTING WITH PROGRAMS AND)
SERVICES FROM A NUMBER OF)
PROGRAM/SERVICE SOURCES)

Examiner: Murrell, J.

Art Unit: 2602

*#14/B
mull
6/13/95
mull
6/13/95*

Hon. Commissioner of Patents
and Trademarks
Washington, D.C. 20231

AMENDMENT AND RESPONSE

Sir:

This is in response to the Office Action mailed April 10, 1995, the shortened statutory period for which runs until July 10, 1995. Please revise the subject application as indicated below.

IN THE SPECIFICATION

At page 1, line 6, please replace "_____" with --08/082,081--.

At page 1, line 9, please replace "_____" with --08/082,056--.

At page 1, line 11, please replace "_____" with --08/081,471--.

At page 32, line ²⁴4, please replace "depressed", second occurrence, with --displayed--.

090 BA 05/26/95 08081931

1 102 456.00 CK

B

IN THE CLAIMS

Please cancel Claims 3-7, 25-26, 29, 49-52 and 70-71 without prejudice.

Please amend Claims 2, 8-14, 17-22, 24, 27-28, 30, 32-36, 38-48, 53-60, 63-67, 69, and 72-90 as follows:

1 2. (Once Amended) An interactive user interface and audio-visual (A/V) system,
2 comprising:
3 [a signal source originating from an A/V program service provider, for providing audio-
4 visual signals in an electronic signal spectrum:]
5 a transceiver coupled to an audio-visual (A/V) display for receiving [said audio-visual
6 signals,] audio-visual signals in an electronic signal spectrum from a signal source, said
7 transceiver including interface generation means for [displaying an interface on said A/V
8 display,] causing said A/V display to display an interface, said interface including selectively
9 displayed multiple levels of information related to an audio-visual program viewed on said A/V
10 [display,] display, wherein said multiple levels of information include information received by
11 said transceiver over a plurality of information tracks;
12 control means in communication with said transceiver for permitting a user viewing said
13 A/V display to selectively display said multiple levels of information on said A/V display.

Sub 1
1 ~~8. (Once Amended) The audio-visual system as defined by Claim [6] 2 wherein said~~
2 ~~interface is displayed in an overlay region that includes at least one direction cue to identify at~~
3 ~~least one direction on said A/V display corresponding to at least one additional level of~~
4 ~~information.~~

ba
1 ~~2. (Once Amended) The audio-visual system as defined by Claim 8 wherein a plurality of~~
2 ~~direction cues are displayed on said A/V display, [said available direction cues being highlighted~~

04860.P1050

3 on said A/V display to said user.] wherein one or more of said plurality of direction cues are
4 available direction cues, said available direction cues being highlighted on said A/V display.

1 ³ ~~10~~ (Once Amended) An interactive user interface and audio-visual (A/V) system,

2 comprising:

3 a transceiver coupled to an audio-visual (A/V) display for receiving audio-visual signals
4 in an electronic signal spectrum from a signal source, said transceiver including interface
5 generation means for causing said A/V display to display an interface, said interface including
6 selectively displayed multiple levels of information related to a currently viewed program viewed
7 on said A/V display;

8 control means in communication with said transceiver for permitting a user viewing said
9 A/V display to selectively display said multiple levels of information on said A/V display;

10 wherein a plurality of direction cues are displayed on said A/V display, wherein one or
11 more of said plurality of direction cues are available direction cues, said available direction cues
12 being highlighted on said A/V display;

13 [The audio-visual system as defined by Claim 8] wherein said control means includes [a
14 remote control device having] direction arrow buttons, said user activating one of said
15 [highlighted] direction arrow buttons corresponding to the direction identified by one of said
16 available direction [cue] cues resulting in said transceiver [displaying] causing said A/V display
17 to display an additional level of information related to said currently viewed program.

1 ⁴ ~~11~~ (Once Amended) The audio-visual system as defined by Claim ³ ~~10~~ wherein activation of
2 a left and a right direction button on said [remote] control [device] means results in movement
3 between pages of information relating to said currently viewed program.

1 ⁵ ~~12~~ (Once Amended) The audio-visual system as defined by Claim ³ [11] ~~10~~ wherein
2 activation of an up and a down button on said [remote] control [device] means results in

04860.P1050

³


3 movement between additional levels of information, wherein said additional levels of
4 information [providing] provide data on a plurality of currently viewed subjects in said currently
5 viewed [television] program.

1 ⁶ ~~12~~ (Once Amended) The audio-visual system as defined by Claim [12] ³ ~~12~~ wherein said
2 additional levels of information are selectively displayed in an overlay region that comprises a
3 horizontal bar on a lower portion of said A/V display.

1 ⁷ ~~14~~ (Once Amended) An interactive user interface and audio-visual (A/V) system,
2 comprising:
3 a transceiver coupled to an audio-visual (A/V) display for receiving audio-visual signals
4 in an electronic signal spectrum from a signal source, said transceiver including interface
5 generation means for causing said A/V display to display an interface, said interface including
6 selectively displayed multiple levels of information related to an audio-visual program viewed on
7 said A/V display;

8 control means in communication with said transceiver for permitting a user viewing said
9 A/V display to selectively display said multiple levels of information on said A/V display;

10 [The audio-visual system as defined by Claim 2] wherein said transceiver further includes
11 a switcher and at least one tuner/demodulator coupled to said signal source;
12 [source,] said switcher coupling said at least one tuner/demodulator to said A/V display[,], and a
13 storage means, for switching digital and analog A/V data between said signal [source originating
14 from service provider,] source, said A/V display and said storage means,

15 said transceiver further including
16 at least one processor unit,
17 at least one system memory unit, and

04860.P1050

4
Cb

18 a bus controller cooperatively coupled together for receiving input control and data
19 signals and in response generating output control and data signals for said [A/V program/service
20 provider,] signal source, said A/V display, and said storage means.

10
1 ~~17~~. (Once Amended) The audio-visual system as defined by Claim [16] ~~15~~ wherein said
2 program listing data includes program title data.

11
1 ~~18~~. (Once Amended) The audio-visual system as defined by Claim [17] ~~15~~ wherein said
2 program listing data [further] includes show time data and channel number data.

12
1 ~~19~~. (Once Amended) The audio-visual system as defined by Claim [18] ~~15~~ wherein said
2 program listing data [further] includes length data and caption data for audio-visual programs.

B3
1 ~~20~~. (Once Amended) The audio-visual system as defined by Claim [19] ~~14~~ wherein said
2 electronic signal spectrum comprises analog and digital A/V channels.

14
1 ~~21~~. (Once Amended) The audio-visual system as defined by Claim [20] ~~14~~ wherein said
2 control means includes a hand held remote control device.

1 ~~22. (Once Amended) The audio-visual system as defined by Claim 2, wherein said interface~~
2 ~~generation means further includes listing means for causing said A/V display to selectively~~
3 ~~[displaying] display a program listing that contains listing information related to A/V programs~~
4 ~~[which may be viewed] viewable on said A/V display.~~

B4
1 ~~24. (Once Amended) The audio-visual system as defined by Claim 23 wherein said [listing~~
2 ~~interface comprises a] program listing [of] lists currently available programs available to the user~~
3 ~~for viewing.~~

04860.P1050

5

Handwritten signature/initials: "G7"

1 ¹⁵~~27~~ (Once Amended) An interactive user interface and audio-visual (A/V) system,
2 comprising:
3 a transceiver coupled to an audio-visual (A/V) display for receiving audio-visual signals
4 in an electronic signal spectrum from a signal source, said transceiver including interface
5 generation means for causing said A/V display to display an interface, said interface including
6 selectively displayed multiple levels of information related to an audio-visual program viewed on
7 said A/V display;
8 control means in communication with said transceiver for permitting a user viewing said
9 A/V display to selectively display said multiple levels of information on said A/V display
10 wherein said interface generation means further includes listing means for causing said
11 A/V display to selectively display a program listing that contains listing information related to
12 A/V programs viewable on said A/V display;
13 ^{B5} [The audio-visual system as defined by Claim 23 wherein said listing interface] wherein
14 said program listing includes a first picture-in-a-picture (PIP) window in which the currently
15 viewed program viewed by said user prior to said activation of said listing means is displayed on
16 said A/V display.

1 ¹⁶~~28~~ (Once Amended) The audio-visual system as defined by Claim ¹⁵~~27~~ wherein said program
2 listing [interface] includes a program listing icon to identify to said user that said listing means
3 has been activated.

1 ¹⁷~~30~~ (Once Amended) The audio-visual system as defined by Claim ¹⁵~~27~~ wherein a listing for
2 the currently viewed program that is displayed in said first picture-in-picture (PIP) window is
3 ^{B6} highlighted when said program listing is activated.

04860.P1050

6
08

1 ¹⁹~~32~~ (Once Amended) The audio-visual system as defined by Claim ¹⁸~~31~~ wherein said program
2 listing [may be scrolled] scrolls up and down [by said user to view] to display additional program
3 listings for said current date and time [by continuing] when said user continues to depress
4 respectively, said up and down buttons on said remote control device.

1 ²⁰~~33~~ (Once Amended) The audio-visual system as defined by Claim [32] ¹⁸~~31~~ wherein
2 depressing said up and down buttons causes a particular program listing [may be selected by
3 depressing said up and down buttons,] to be selected, said particular program listing being
4 thereby highlighted on said A/V display.

1 ²¹~~34~~ (Once Amended) The audio-visual system as defined by Claim [33] ¹⁵~~32~~ wherein said
2 program listings are displayed in hourly time slots, programs of less than one hour in duration
3 being displayed adjacent to one another separated by a half hour delineation mark.

1 ²²~~35~~ (Once Amended) The audio-visual system as defined by Claim [34] ¹⁸~~32~~ wherein said
2 interface generation means [displays] causes said A/V display to display listings for future time
3 slots if said user depresses a predefined [left or right] button on said remote control device and in
4 which the speed of display increases if the user depresses [such] the predefined button longer
5 than N seconds.

Subca
1 ~~36.~~ (Once Amended) ~~The audio-visual system as defined by Claim [26] ²² further wherein~~
2 ~~said interface generation means includes [mark and reminder] marking means for [identifying]~~
3 ~~marking programs on said program [listing of which said user desires to be reminded.] listing.~~

1 ²³~~38~~ (Once Amended) The audio-visual system as defined by Claim ²⁴~~37~~ wherein said
2 [reminder] marking means is activated by said user choosing a selected program from said

04860.P1050

CA 61

3 [listing displayed by said listing interface] program listing using said up and down buttons and
4 then activating a mark button on said remote control device.

1 ~~39~~^{2b} (Once Amended) An interactive user interface and audio-visual (A/V) system.

2 comprising:

3 a transceiver coupled to an audio-visual (A/V) display for receiving audio-visual signals
4 in an electronic signal spectrum from a signal source, said transceiver including interface
5 generation means for causing said A/V display to display an interface, said interface including
6 selectively displayed multiple levels of information related to an audio-visual program viewed on
7 said A/V display;

8 control means in communication with said transceiver for permitting a user viewing said
9 A/V display to selectively display said multiple levels of information on said A/V display

10 wherein said interface generation means further includes listing means for causing said
11 A/V display to selectively display a program listing that contains listing information related to
12 A/V programs viewable on said A/V display;

13 wherein said interface generation means includes marking means for marking programs
14 on said program listing, each of said programs on said program listing corresponding to one of
15 said audio-visual signals;

16 wherein said marking means is activated by said user choosing a selected program from
17 said program listing using up and down buttons on said control means and then activating a mark
18 button on said control means;

19 [The audio-visual system as defined by Claim 38] wherein when said user activates said
20 mark [button,] button on said control means, said listing [interface] means [displays] causes said
21 A/V display to display a reminder mark adjacent to said marked program;

22 wherein said interface generation means causes said A/V display to display a reminder
23 indication on a date and at a time based on the date and time that said selected program is carried
24 over the audio-visual signal that corresponds to said marked program.

04860.P1050

8


1 ⁵⁷⁸ ~~38~~ (Once Amended) The audio-visual system as defined by Claim [38 wherein said
2 interface generation means displays a reminder icon at a predefined location on said A/V display,
3 corresponding to the date and at the time of said selected program.] ~~39~~ ^{38 26} wherein said interface
4 generation means causes said A/V display to display a reminder icon at a predefined location on
5 said A/V display on the date and at the time that said selected program is carried by one of said
6 audio-visual signals.

1 ⁵²⁸ ~~38~~ (Once Amended) An interactive user interface and audio-visual (A/V) system,
2 comprising:
3 a transceiver coupled to an audio-visual (A/V) display for receiving audio-visual signals
4 in an electronic signal spectrum from a signal source, said transceiver including interface
5 generation means for causing said A/V display to display an interface, said interface including
6 selectively displayed multiple levels of information related to an audio-visual program viewed on
7 said A/V display;
8 control means in communication with said transceiver for permitting a user viewing said
9 A/V display to selectively display said multiple levels of information on said A/V display;
10 wherein said interface generation means further includes listing means for causing said
11 A/V display to selectively display a program listing, said program listing including information
12 related to A/V programs viewable on said A/V display;
13 wherein said interface generation means includes marking means for marking a selected
14 program on said program listing;
15 wherein said interface generation means causes said A/V display to display a reminder
16 icon at a predefined location on said A/V display on the date and at the time that said selected
17 program is carried by one of said audio-visual signals;

04860.P1050

⁹
71

18 [The audio-visual system as defined by Claim 40] wherein said reminder icon comprises
19 a [second] picture-in-a-picture (PIP) window in which said selected program [said viewer desires
20 to be reminded of] is displayed.

1 ~~28~~ ²⁹ (Once Amended) The audio-visual system as defined by Claim ~~41~~ ²⁸ wherein said [remote]
2 control [device] means further includes a jump button, the activation of said jump button by a
3 user while said [reminder second] PIP window is displayed[,] results in said A/V display
4 displaying said selected program [which said user desires to be reminded of] in a primary portion
5 of said A/V display, and said program originally displayed in said primary portion displayed in
6 said [second] PIP window.

1 ~~29~~ ³⁰ (Once Amended) The audio-visual system as defined by Claim ~~42~~ ²⁹ wherein further
2 repetitive activation of the jump button results in the display in said primary portion of said
3 display of other selected programs [in] which said user has marked using said [mark button,]
4 marking means.

1 ~~30~~ ³¹ (Once Amended) The audio-visual system as defined by Claim [34] ~~43~~ ³⁰ wherein said
2 interface generation means further include; record means for [recording] causing programs [on]
3 to be recorded by a storage recorder coupled to said transceiver.

1 ~~31~~ ³² (Once Amended) The audio-visual system as defined by Claim ~~44~~ ³¹ wherein said record
2 means is activated by said user choosing [a] said selected program on said listing using [said] up
3 and down buttons on said control means and then activating a record button on said [remote]
4 control [device.] means.

04860.P1050

1072

1 ~~46~~³³ (Once Amended) The audio-visual system as defined by Claim ~~45~~³², whereupon said user
2 activating said record button, said listing [inter:face] means [displays] causes said A/V display to
3 display a record icon adjacent to said selected program.

1 ~~46~~³⁴ 47. (Once Amended) The audio-visual system as defined by Claim [46] ~~44~~³¹ wherein said
2 [recorder] record means [records on] causes said storage recorder to record said selected program
3 on the date and at the time said selected program is received by said transceiver.

1 ~~48~~³⁵ 48. (Once Amended) A method for generating and displaying an interface on an audio-visual
2 (A/V) system comprising the steps of:
3 [providing] receiving audio-visual (A/V) signals in an electronic signal spectrum from a
4 signal [source, said signal] source [originating from an A/V program service provider;]
5 [receiving said A/V signals] using a transceiver coupled to an A/V display, said transceiver
6 including interface generation means:
7 said interface generation means [for displaying an interface on said A/V display,] causing
8 said A/V display to display an interface, said interface including [selectively displayed] a
9 currently viewed level of information that has been selected by a user from multiple levels of
10 information related to an audio-visual program viewed on said A/V display;
11 [a] said user selectively displaying said multiple levels of information on said
12 [television] A/V display using control means in communication with said [transceiver.]
13 transceiver:
14 said user pressing one or more direction buttons on said control means to cause said
15 currently viewed level of information about said audio-visual program to be replaced in said
16 interface with a next level of information about said audio-visual program.

1 ~~52~~³⁶ (Once Amended) The method as defined by Claim [52] ~~48~~³⁵ further including the step of
2 displaying a numeric level indicator identifying the currently viewed level of information.

04860.P1050

1:  73

37
1 ~~54~~ (Once Amended) The method as defined by Claim [53] ~~38~~ ³⁵ wherein said interface is
2 displayed in an overlay region that includes at least one direction cue to identify at least one
3 direction on said A/V display corresponding to at least one additional level of information.

38
1 ~~55~~ (Once Amended) The method as defined by Claim ~~54~~ ³⁷ wherein a plurality of direction
2 cues are displayed on said A/V display, wherein said plurality of direction cues include one or
3 more available direction cues, said available direction cues being highlighted on said A/V
4 display.

39
1 ~~56~~ (Once Amended) The method as defined by Claim [54] ~~38~~ ³⁵ wherein said control means
2 includes a remote control device having direction arrow buttons, said user activating one of said
3 [highlighted] direction arrow buttons corresponding to the direction identified by one of said
4 available direction [cue] cues resulting in said transceiver [means displaying] causing said A/V
5 display to display an additional level of information related to [said] a currently viewed program.

40
1 ~~57~~ (Once Amended) The method as defined by Claim [55] ~~36~~ ³⁹ wherein activation of a left
2 and a right direction button on said [remote] control [device] means results in movement between
3 pages of information relating to said currently viewed program.

41
1 ~~58~~ (Once Amended) The method as defined by Claim [57] ~~36~~ ³⁹ wherein activation of an up
2 and a down button on said [remote] control [device] means results in movement between
3 additional information levels, said additional information levels providing data on a plurality of
4 currently viewed subjects in said currently viewed program.

04860.P1050

74

1 ⁴⁴²~~59~~ (Once Amended) The method as defined by Claim [58] ²⁹~~36~~ wherein said interface is
2 displayed in an overlay region that comprises a horizontal bar on a lower portion of said A/V
3 display.

1 ⁴³~~60~~ (Once Amended) [The] Δ method for generating and displaying an interface on an audio-
2 visual (A/V) system comprising the steps of:
3
4 [as defined by Claim 59] receiving audio-visual (A/V) signals in an electronic signal spectrum
5 from a signal source using a transceiver coupled to an A/V display, said transceiver including
6 interface generation means for causing said A/V display to display an interface, said interface
7 including selectively displayed multiple levels of information related to an audio-visual program
8 viewed on said A/V display:

9
10 a user selectively displaying said multiple levels of information on said A/V display using
11 control means in communication with said transceiver;

12
13 wherein said transceiver further includes:

14 [a transceiver comprising] a switcher and

15 at least one tuner/demodulator coupled to said signal source,

16 said switcher coupling said at least one tuner/demodulator, said A/V display, and a

17 storage means for switching digital and analog A/V data between said signal source, said A/V

18 display and said storage means, said transceiver further comprising at least one processor unit, at

19 least one system memory unit, at least one data bus, an A/V decoder, an A/V encoder, a control

20 interface unit, and a bus controller cooperatively coupled together for receiving input control and

21 data signals and in response generating output control and data signals for said [A/V program

22 service provider,] signal source, said A/V display, and said storage means.

04860.P1050

¹³
MA 75

45
1 ~~62~~ (Once Amended) The method as defined by Claim ~~[62]~~ ^{44b} ~~61~~ wherein said program listing
2 data includes program title data.

46
1 ~~64~~ (Once Amended) The method as defined by Claim ~~[63]~~ ^{44b} ~~61~~ wherein said program listing
2 data [further] includes show time data and channel number data.

47
1 ~~65~~ (Once Amended) The method as defined by Claim ~~[64]~~ ^{44b} ~~61~~ wherein said program listing
B10 2 data [further] includes length data and caption data for A/V programs.

48
1 ~~66~~ (Once Amended) The method as defined by Claim ~~[65]~~ ^{44b} ~~60~~ wherein said electronic signal
2 spectrum comprises analog and digital channels.

54
1 ~~67~~ (Once Amended) The method as defined by Claim ~~[66]~~ ⁴³ ~~60~~ wherein said transceiver
2 further includes listing means for causing said A/V display to selectively [displaying] display
3 listing information related to A/V programs [which may be viewed] viewable on said A/V
4 display.

B11 56
1 ~~68~~ (Once Amended) The method as defined by Claim ~~68~~ ^{55a} wherein said listing means
2 [displays a] causes said A/V display to display a program listing of currently available A/V
3 programs available to the user for viewing on said A/V display.

B12 57
1 ~~72~~ (Once Amended) The method as defined by Claim ~~69~~ ⁵⁶ wherein said listing [interface
2 displays] means causes said A/V display to display a first picture-in-picture (PIP) window in
3 which the currently viewed program viewed by said user prior to said activation of said listing
4 means is displayed on said A/V display.

04860.P1050

14 76

58
73 (Once Amended) The method [system] as defined by Claim ~~72~~⁵⁷ wherein said [program]
2 listing [interface displays] means causes said A/V display to display a program listing icon to
3 identify to said user that said program listing has been activated.

~~59~~ 59
74 (Once Amended) The method as defined by Claim ~~73~~⁵⁸ wherein said [program listing
2 interface further displays] listing means further causes said A/V display to display the current
3 date and time.

~~61~~ 61
75 (Once Amended) The method as defined by Claim ~~72~~⁵⁷ wherein upon activation of said
2 [program] listing means, the listing for the currently viewed [A/V] program displayed in said
3 first PIP window is highlighted.

~~62~~ 62
76 (Once Amended) The method as defined by Claim ~~75~~⁶¹ wherein said program listing is
2 selectively scrolled up and down by said user to view additional program listings for said current
3 date and time by continuing to depress, respectively, said up and down buttons on said [remote]
4 control [device.] means.

~~63~~ 63
77 (Once Amended) The method as defined by Claim [76] ~~75~~⁶¹ wherein depressing said up
2 and down buttons selects a particular program [listing may be selected by depressing said up and
3 down buttons,] listing, said particular program, listing being thereby highlighted on said A/V
4 display.

~~60~~ 60
78 (Once Amended) The method as defined by Claim [77] ~~76~~⁵⁷ wherein [said] A/V program
2 listings in said program listing are displayed in hourly time slots, programs of less than one hour
3 in duration being displayed adjacent to one another separated by a half hour delineation mark.

04860.P1050

15
77

~~57~~ 64 (Once Amended) The method as defined by Claim ~~[77]~~ 61 wherein said interface
1 generation means [displays] causes said A/V display to display listings for future time slots if
2 said user depresses a [left or right arrow] button on said [remote] control [device] means where
3 the speed of display increases if the user depresses said button longer than N seconds.
4

~~60~~ 49 (Once Amended) The method as defined by Claim ~~[79]~~ 43 further wherein said interface
1 generation means includes [reminder] marking, means for [identifying] marking A/V programs
2 [on said] in a program [listing of which said user desires to be reminded.] listing.
3
4

~~61~~ 50 (Once Amended) The method as defined by Claim ~~80~~ 49 wherein said [reminder] marking
1 means is activated by said user choosing a selected A/V program from said [listing displayed by
2 said] program listing [interface] using [said] up and down buttons and then activating a mark
3 button on said [remote] control [device.] means.
4

~~62~~ 51 (Once Amended) The method as defined by Claim ~~[81]~~ 43 wherein when said user
1 activates [said mark button, said listing interface means displays] a mark button on said control
2 means, a listing means causes said A/V display to display a reminder mark adjacent to [said
3 marked program.] a selected program in a program listing.
4

~~63~~ 52 (Once Amended) The method as defined by Claim ~~82~~ 51 wherein said interface [means
1 displays a reminder icon at a predefined location on said A/V display corresponding to the date
2 and the time of said selected program.] generation means causes said A/V display to display a
3 reminder icon at a predefined location on said A/V display on the date and at the time that said
4 selected program is carried on one of said audio-visual signals.
5

~~64~~ 65 (Once Amended) A method for generating and displaying an interface on an audio-visual
1 (A/V) system comprising the steps of:
2

04860.P1050

78

3
4 receiving audio-visual (A/V) signals in an electronic signal spectrum from a signal source
5 using a transceiver coupled to an A/V display, said transceiver including interface generation
6 means for causing said A/V display to display an interface, said interface including selectively
7 displayed multiple levels of information related to an audio-visual program viewed on said A/V
8 display;
9 a user selectively displaying said multiple levels of information on said A/V display using
10 control means in communication with said transceiver;
11 wherein said transceiver further includes listing means for causing said A/V display to
12 selectively display a program listing that contains information related to A/V programs viewable
13 on said A/V display;
14 wherein said interface generation means includes marking means for marking a selected
15 program on said program listing;
16 wherein said interface generation means causes said A/V display to display a reminder
17 icon at a predefined location on said A/V display on the date and at the time that said selected
18 program is carried on one of said audio-visual signals;
19 [The method as defined by Claim 83] wherein said reminder icon [displays a second]
20 includes a picture-in-picture window in which said selected program [said viewer desires to be
21 reminded of] is displayed.

1 ^{65 66} ~~85~~ (Once Amended) The method as defined by Claim ~~84~~ ⁶⁵ further including the step of
2 activating a jump button on said [remote] control [device,] means, the activation of said jump
3 button results in said A/V display displaying said selected program [which said user desires to be
4 reminded of] in a primary portion of said display, said program originally displayed in said
5 primary portion displayed in [said second] a PIP window.

04860.P1050

WA 79

1 ~~86~~⁶⁷ (Once Amended) The method as defined by Claim ~~85~~⁶⁶ further including the step of said
2 user repetitively activating said jump button resulting in the display in said primary portion of
3 said A/V display of other programs which said user has marked using [said mark button.] a
4 marking means.

1 ~~87~~⁶⁸ (Once Amended) The method as defined by Claim [86] ~~84~~⁶⁵ wherein said interface
2 generation means further includes record means for [recording] causing programs [on] to be
3 recorded by a storage recorder coupled to said transceiver.

1 ~~88~~⁶⁹ (Once Amended) The method as defined by Claim ~~87~~⁶⁸ wherein said record means is
2 activated by said user choosing a highlighted program on said program listing using said up and
3 down buttons and then activating a record button on said [remote] control [device.] means.

1 ~~89~~⁷⁰ (Once Amended) The method as defined by Claim ~~88~~⁶⁹ whereupon said user activates said
2 record button, said [program listing interface means displays] listing means causes said A/V
3 display to display a record icon adjacent to said highlighted program.

1 ~~90~~⁷¹ (Once Amended) The method as defined by Claim [89] ~~88~~⁶⁹ wherein said record means
2 [records on] causes said storage recorder to record said highlighted program on the date and at
3 the time said highlighted program is received by said transceiver.

04860.P1050

14
ATD 80

REMARKS

The Examiner is thanked for the performance of a thorough search.

By this amendment, Claims 2, 8-14, 17-22, 24, 27-28, 30, 32-36, 38-48, 53-60, 63-67, 69, 72-90 have been amended. Claims 3-7, 25-26, 29, 49-52 and 70-71 have been canceled. Hence, Claims 2, 8-24, 27-28, 30-48, 53-69 and 72-90 are pending in the application.

SUMMARY OF THE REJECTIONS/OBJECTIONS

In the Office Action, the drawings were objected to on the grounds that they do not shown every feature of the invention specified in the claims. The specification was objected to as failing to provide proper antecedent basis for the claimed subject matter. The specification was rejected under 35 U.S.C. § 112, first paragraph as failing to provide an enabling disclosure. Claims 2-90 were rejected under 35 U.S.C. § 112, first paragraph for the reasons set forth in the rejection of the specification. Claims 2-90 were rejected under 35 U.S.C. § 112, second paragraph for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 2-6, 22-34, 36-40, 44-45 and 48-59 were rejected under 35 U.S.C. § 102(e) as being unpatentable over U.S. Patent No. 5,353,121 to Young et al. ("YOUNG"). Claims 7, 35 and 46-47 were rejected under 35 U.S.C. § 103 as being unpatentable over YOUNG. Claims 8-13 were rejected under 35 U.S.C. § 103 as being unpatentable over YOUNG in view of U.S. Patent No. 5,253,066 to Vogel ("VOGEL").

THE REJECTIONS/OBJECTIONS NOT BASED ON PRIOR ART

The drawings were objected to on the grounds that they do not show every feature of the invention specified in the claims. Specifically, it was asserted that the drawings do not show "interface generation means" in Claim 2 and Claim 48, or "record means" of Claims 44 and 87.

The Office Action also queried "what is the 'record means' if the claimed 'storage recorder' is VCR 56?".

The claimed "interface generation means" performs the function of "causing said A/V display to display an interface". In the embodiment illustrated in the drawings and described in the specification, this function is performed by the following structure:

- (1) CPU module 62 which receives the data stream of program listings. (Page 27, lines 8-14),
- (2) The system memory 65 which stores the section of the program listings that are most relevant to a user. (Page 27, lines 8-14),
- (3) A/V processor 77 which is "used to manipulate, process, render, mix and otherwise re-arrange digital data into coherent audio-visual displays" (Page 24, lines 3-6) and
- (4) A/V connect module 66 which "provides a graphic overlay function that superimposes an A/V signal from the video encoder 78 against another A/V signal" that allows "both signals to be simultaneously displayed on the TV". (Page 23, lines 2-5)

All of these elements are disclosed in the drawings. See, for example, Figure 2. Therefore, it is respectfully submitted that the drawings show an embodiment of the "interface generation means."

The recited "record means" performs the function of "causing programs to be recorded by a storage recorder coupled to said transceiver". In the illustrated embodiment, the "storage recorder" is VCR 56. The "record means" is therefore the circuitry within transceiver 54 which causes VCR 56 to record selected programs. In the illustrated embodiment, this circuitry includes A/V connect module 66 and, more specifically, switcher 69 which routes the appropriate signal to VCR 56 at the appropriate time.

VCR 56, A/V connect module 66 and switcher 69 are all illustrated in the drawings. Therefore, it is respectfully submitted that 37 C.F.R. § 1.83(a), which requires all claimed elements to be shown, is satisfied.

The specification was objected to as failing to provide proper antecedent basis for the claimed subject matter. Specifically, the Office Action asserted that the "interface generation means" lacks antecedent basis in the specification. As explained above with respect to the objection to the drawings, the specification shows and describes elements which perform the recited function of the claimed "interface generation means." Therefore, it is respectfully submitted that the specification provides antecedent basis for the "interface generation means".

The specification was rejected under 35 U.S.C. § 112, first paragraph as failing to provide an enabling disclosure. Claims 2-90 were rejected under 35 U.S.C. § 112, first paragraph for the reasons set forth in the rejection of the specification. Specifically, the Office Action questioned:

- (1) how the "interface generation means" or the "listing means" can display an interface or listings when the claimed "A/V display" actually displays the interface or listings;
- (2) how the "record means" can record programs when the claimed "storage recorder" actually records the programs; and
- (3) how the "storage means" switches between the "signal source", the "A/V display" and the "storage means" when the claimed switcher actually switches between the above elements.

With respect to question 1, the claims have been amended to state that the interface generation means (and the listing means) causes an interface (and listings) to be displayed on the "A/V" display. With respect to question 2, the claims have been amended to state that the record means causes the storage recorder to record programs. With respect to question 3, the claims have been revised to make it clear that it is the switcher that switches between the various

elements. In light of the amendments, it is respectfully submitted that 35 U.S.C. § 112, first paragraph has been satisfied.

Claims 2-90 were rejected under 35 U.S.C. § 112, second paragraph for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. With respect to this rejection, the Office Action listed several phrases that were considered unclear. In response, the claims have been revised to address the issues raised in the Office Action and otherwise clarify the invention.

It is respectfully submitted that, as amended, the presently pending claims particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Therefore, it is submitted that the present claims satisfy 35 U.S.C. § 112, second paragraph.

THE REJECTIONS BASED ON THE PRIOR ART

Claims 2-6, 22-34, 36-40, 44-45 and 48-59 were rejected under 35 U.S.C. § 102(e) as being unpatentable over YOUNG. Claims 7, 35 and 46-47 were rejected under 35 U.S.C. § 103 as being unpatentable over YOUNG. Claims 8-13 were rejected under 35 U.S.C. § 103 as being unpatentable over YOUNG in view of VOGEL. These rejections are respectfully traversed.

Of the claims that stand rejected, Claims 2, 10, 27, 39 and 48 are independent. It is respectfully submitted that, as amended, each of these independent claims contains one or more significant elements that is neither shown nor suggested by YOUNG, VOGEL, or the combination of YOUNG and VOGEL.

Various significant differences between the art of record and the claimed invention shall be discussed hereafter. These differences are merely exemplary. Other significant differences that are not specifically discussed herein may also exist.

CLAIM 2

With respect to amended Claim 2, it recites:

interface generation means for causing said A/V display to display an interface, said interface including selectively displayed multiple levels of information related to an audio-visual program viewed on said A/V display, wherein said multiple levels of information include information received by said transceiver over a plurality of information tracks;

Both YOUNG and VOGEL disclose a mechanism for displaying program listing information. YOUNG receives program listing information by decoding data transmitted during a vertical blanking interval, or by a local station or cable channel. (See col. 18, lines 37-55) VOGEL receives program listing information from "a signal modulated with data relating to the television schedule and the programs currently being broadcast." (See col. 3, lines 38-42). Neither YOUNG nor VOGEL discloses or suggests a system that allows a user to selectively display multiple levels of information about a particular program where the information is derived from more than one information track. Further, neither YOUNG nor VOGEL discloses or even suggests the general concept of information tracks. An embodiment of this claimed feature is fully described at page 33, line 24 to page 35, line 7.

Because an expressly recited element of Claim 2 is not disclosed or suggested by YOUNG or VOGEL, it is respectfully submitted that the invention defined by Claim 2 is not anticipated or in any way rendered obvious by YOUNG, VOGEL, or any combination of features shown in YOUNG or VOGEL. Therefore, it is respectfully submitted that Claim 2 and the claims that depend on Claim 2 are in condition for allowance.

CLAIMS 10 and 48

With respect to amended Claim 10, it recites a system that allows a user to navigate through "multiple levels of information related to said currently viewed program" by "activating one of said direction arrow buttons" on a control means, where the arrow button corresponds "to the direction identified by one of said available direction cues" displayed on the A/V display.

Similarly, Claim 48 recites a step in which a user presses "one or more direction buttons on said control means to cause said currently viewed level of information about said audio-visual program to be replaced in said interface with a next level of information about said audio-visual program". These claims therefore require a specific mechanism for navigating through multiple levels of information relating to a single specific program.

In contrast, the YOUNG system displays a single level of program information (see program note 52 in Fig. 6). Because YOUNG only provides one level of information about any given program, YOUNG does not disclose any mechanism at all for navigating through multiple levels of information about a particular program. Further, there would be no reason to combine such a feature with YOUNG. Similarly, VOGEL does not disclose any mechanism for navigation through multiple levels of information about a particular program. VOGEL merely allows a user to scroll through a program listing.

Because expressly recited elements in Claims 10 and 48 are not disclosed or suggested by YOUNG or VOGEL, it is respectfully submitted that the invention defined by Claims 10 and 48 are not anticipated or in any way rendered obvious by YOUNG, VOGEL, or any combination of features shown in YOUNG or VOGEL. Therefore, it is respectfully submitted that Claims 10 and 48 and the claims that depend on Claims 10 and 48 are in condition for allowance.

CLAIM 27

With respect to amended Claim 27, it recites a system in which the currently viewed program is displayed in a picture-in-a-picture window when the program listing is activated. An embodiment of this feature is shown in Fig. 12. Neither YOUNG nor VOGEL disclose or even suggest displaying the currently viewed program in a picture-in-a-picture window when the program listing is activated. Figure 2 of YOUNG illustrates the television display when YOUNG's guide is activated (see col. 10, lines 29-33). YOUNG explains that the cursor is on the same row as the listing for the currently selected channel. The program that was playing

when the guide was activated is not displayed VOGEL does not disclose the simultaneous display of a program and a program listing.

Because an expressly recited element of Claim 27 is not disclosed or suggested by YOUNG or VOGEL, it is respectfully submitted that the invention defined by Claim 27 is not anticipated or in any way rendered obvious by YOUNG, VOGEL, or any combination of features shown in YOUNG or VOGEL. Therefore, it is respectfully submitted that Claim 27 and the claims that depend on Claim 27 are in condition for allowance.

CLAIM 39

With respect to amended Claim 39, it recites a system in which a user operates controls to mark a program in a program listing. The system includes "interface generation means" which "causes said A/V display to display a reminder indication on a date and at a time based on the date and time that said selected program is carried over the audio-visual signal that corresponds to said marked program". Neither YOUNG nor VOGEL disclose or suggest this feature. Both YOUNG and VOGEL merely disclose selecting a program for recording. Neither YOUNG nor VOGEL generate "reminder indications".

Because an expressly recited element of Claim 39 is not disclosed or suggested by YOUNG or VOGEL, it is respectfully submitted that the invention defined by Claim 39 is not anticipated or in any way rendered obvious by YOUNG, VOGEL, or any combination of features shown in YOUNG or VOGEL. Therefore, it is respectfully submitted that Claim 39 and the claims that depend on Claim 39 are in condition for allowance.

For the reasons given above, it is respectfully submitted that specific elements recited in the rejected claims are not described, shown or even suggested by YOUNG, VOGEL or the combination of VOGEL. Therefore, it is submitted that all of the pending claims are allowable over the art of record.

CLAIMS 14, 41, 60 and 84

Claims 14, 41, 60 and 84 have been rewritten in independent form. These claims were objected to as being dependent on rejected claims. It is respectfully submitted that, as amended, these claims and the claims dependent thereon are now in condition for allowance.

Based on the foregoing, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a formal Notice of Allowance is believed next in order, and that action is most earnestly solicited.


The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

Please charge any shortages or credit any overages to Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Date: 5/4, 1995


Brian D. Hickman
Reg. No. 35,894

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, California 90025-1026
(408) 720-8598

FIRST CLASS CERTIFICATE OF MAILING
(37 C.F.R. § 1.8(a))

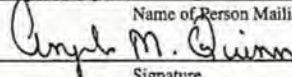
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231

on May 4, 1995

Date of Deposit

Angela M. Quinn

Name of Person Mailing Correspondence



Signature

5-4-95

Date

04860.P1050