

CLAIMS

1. A hearing system including a hearing aid and a personal communication device,
and said hearing aid and said personal communication device both including a
5 short range data transceiver for providing a short range data communication link,
 - said hearing aid including
 - a signal processor processing an electric input signal according to
audio processing parameters of the hearing aid; and
 - a signal processing sub-system with at least two modes of operation,
10 said sub-system applying respective sets of audio processing
parameters for each of said at least two modes of operation;
 - said personal communication device having:
 - an auxiliary classifier component monitoring the use of said personal
communication device,
15 wherein said hearing aid further includes a program selector component having a
classifier analyzing the electric input signal and classifying an auditory
environment of the hearing aid;
wherein said auxiliary classifier component of said personal communication
device is generating a notification when detecting a change of
20 environment or use, and transmitting the notification to said hearing aid
andwherein the program selector component is adapted to automatically
select one of the at least two modes of operation for the signal
processing sub-system based on:
the classifier classification, as well as
25 the notification from said auxiliary classifier component regarding a
change of environment or use.
2. The hearing system according to claim 1, wherein the short range data
transceivers of said hearing aid and said personal communication device both are
30 based upon a Bluetooth™ Core Specification.
3. The hearing system according to claim 1, wherein the auxiliary classifier
component is adapted for extracting position data from a navigation component in

the personal communication device, said navigation component receiving satellite originated signals to determine the position of the personal communication device.

- 5 4. The hearing system according to claim 1, wherein the auxiliary classifier component is adapted for extracting position data from a radio telephone component in the personal communication device, said radio telephone component managing cellular radio communication, and the extracted position data including information about a connected base station.
- 10 5. The hearing system according to claim 1, wherein the auxiliary classifier component is adapted for extracting position data from a short range radio component in the personal communication device, said short range radio component managing local connectivity, and the extracted position data including information about connected additional devices and routers.
- 15 6. A method of controlling mode selection in a hearing aid including a signal processor processing an electric input signal according to audio processing parameters of the hearing aid, and a signal processing sub-system having at least two modes of operation, said method including:

 - 20 • analyzing in a classifier the electric input signal in order to determine the acoustic environment of the hearing aid,
 - connecting a personal communication device to the hearing aid by means of a short range data communication link,
 - monitoring the use of said personal communication device,
 - 25 • detecting a change in the environment or the use of the personal communication device and providing a notification for the personal communication device in response to the detected change,
 - transmitting the notification to said hearing aid via said short range data communication link, and
 - 30 • automatically selecting one of said at least two modes of operation for the signal processing sub-system based on:
the acoustic environment of the hearing aid, as well as on
the notification regarding a change of environment or use received from the personal communication device.

7. The method according to claim 6, wherein the personal communication device includes an auxiliary classifier component, and comprising steps of:
- monitoring of the use of the personal communication device, and
 - 5 • deeming the personal communication device to be at a predefined position based on a recognized use pattern.
8. The method according to claim 7, comprising in the auxiliary classifier component notifications when use at home, in car, at office, or at an unknown place is
- 10 detected.
9. A hearing aid including:
- a short range data transceiver for communication with a personal communication device via a short range data communication link;
 - 15 • a signal processor processing an electric input signal according to audio processing parameters of the hearing aid;
 - a signal processing sub-system with at least two modes of operation, said sub-system being adapted for applying respective sets of audio processing parameters for each of said at least two modes of operation; and
 - 20 • a program selector component having a classifier analyzing the electric input signal and classifying an auditory environment of the hearing aid;
 - wherein the short range data transceiver is adapted for receiving a notification when an auxiliary classifier component detects a change of the environment or use of the personal communication device; and
 - 25 • the program selector component is adapted for automatically selecting one of said at least two modes of operation for the signal processing sub-system based on:
the classifier classification, as well as
the notification regarding a change of environment or use received from the
 - 30 personal communication device.