

selecting a hop channel that corresponds to the index value relative to the first hop channel for use as the substitute hop channel.

17. The method of claim 16, wherein the first hop channel is a designated one of the hop channels in the sequence of hop channels.

18. The method of claim 1, wherein the substitute hop channel is selected by a time-fixed relationship between the forbidden hop channel and the substitute hop channel.

19. The method of claim 1, wherein the selecting a hop channel from the sequence of hop channels comprises the steps of:

designating a portion of the sequence of hop channels adjacent to a forbidden hop channel; and

selecting a substitute hop channel from the designated portion of the sequence of hop channels.

20. The method of claim 19, wherein the number of hop channels in the designated portion of the sequence of hop channels is the same for the scanner device and the paging device.

21. A communication device for use in a channel hopping communication system that includes a sequence of hop channels and a paging device, the communication device comprising:

a hop selection circuit configured to repeatedly activate the communication device and to select a hop channel from the sequence of hop channels as a function of a present phase when the communication device is activated; and

a hop substitution circuit configured to determine whether the selected hop channel is a forbidden hop channel, to select a substitute hop channel from the sequence of hop channels as the selected hop channel if the selected hop channel is a forbidden hop channel, and to monitor the selected hop channel for receipt of a paging message during the present phase when the selected hop channel is a forbidden hop channel.

22. The communication device of claim 21, wherein the hop substitution circuit is further operative to monitor interference on the selected hop channel and to decide that the selected hop channel is a forbidden hop channel when the monitored interference exceeds a threshold value.

23. The communication device of claim 22, wherein the hop substitution circuit is further operative to add the selected hop channel to a set of forbidden hop channels if the selected hop channel is determined to be a forbidden hop channel.

24. The communication device of claim 23, wherein the hop substitution circuit is further operative to add a channel, that is adjacent to the selected hop channel, to the set of forbidden hop channels if the selected hop channel is determined to be a forbidden hop channel.

25. The communication device of claim 23, wherein the hop substitution circuit is further operative to remove a hop channel from the set of forbidden hop channels when the hop channel is determined to not be a forbidden hop channel.

26. The communication device of claim 25, wherein the hop substitution circuit is further operative to remove a hop channel from the set of forbidden hop channels when the interference on the hop channel is less than a threshold value.

27. The communication device of claim 21, wherein the hop substitution circuit is further operative to compare the closeness of a value represented by a received paging message and a value within the communication device, and to decide that the selected hop channel is a forbidden hop channel when the closeness of the comparison is outside a threshold range.

28. The communication device of claim 21, wherein the hop substitution circuit is further operative to repetitively select a different substitute hop channel and to determine whether the selected substitute hop channel is forbidden until the selected substitute hop channel is determined to be not forbidden.

29. The communication device of claim 21, wherein the hop substitution circuit is further operative to determine compare the selected hop channel to a set of forbidden hop channels.

30. The communication device of claim 29, wherein the hop substitution circuit is further operative to select a hop channel from the sequence of hop channels that is not within the set of forbidden hop channels.

31. The communication device of claim 29, wherein at least one of the set of forbidden hop channels is associated with received interference from a communication device other than the paging device.

32. The communication device of claim 29, wherein at least one of the set of forbidden hop channels is reserved for use by a communication system that is not the channel hopping communication system.

33. The communication device of claim 21, wherein the substitute hop channel is selected using a time-varying parameter.

34. The communication device of claim 33, wherein the hop substitution circuit is further operative to form an index value from the time-varying parameter and to select the substitute hop channel from the sequence of hop channels using the index value.

35. The communication device of claim 34, wherein the hop substitution circuit is further operative to form an index value from the expression:

$$\text{index value} = (\text{the time-varying parameter modulo } N) + \text{BASE_VALUE},$$

where N is the number of hop channels in the sequence of hop channels and BASE VALUE represents an index value of a first hop channel in the sequence of hop channels.

36. The communication device of claim 34 wherein the hop substitution circuit is further operative to designate one of the hop channels in the sequence of hop channels as a first hop channel and to select a hop channel that corresponds to the index value relative to the first hop channel for use as the substitute hop channel.

37. The communication device of claim 36 wherein the first hop channel is a designated one of the hop channels in the sequence of hop channels.

38. The communication device of claim 21, wherein the substitute hop channel is selected by a time-fixed relationship between the forbidden hop channel and the substitute hop channel.

39. The communication device of claim 21, wherein the hop substitution circuit is further operative to designate a portion of the sequence of hop channels adjacent to a