

and the more frequently they are changed, the more disadvantageous in stably operating the communication.

PRIOR ART DOCUMENT

NON-PATENT DOCUMENT

5 [0005] Non-patent Document 1: IEEE802.11af Task Group, <http://mentor.ieee.org/802.11/>

Non-patent Document 2: IEEE802.22 Working Group, <http://mentor.ieee.org/22/>

Non-patent Document 3: IEEE802.19.1 Task Group,

<http://mentor.ieee.org/802.802.19/documents>

Non-patent Document 4: Federal Communications Commission, Unlicensed Operation

10 in the TV Broadcast Bands, Second Memorandum Opinion and Order, FCC, 10-17-4, Sept. 23, 2010.

Non-patent Document 5: Ofcom, Digital Dividend: Cognitive Access, Consultation on License Exempting Cognitive Devices using Interleaved Spectrum, July 2009.

15 SUMMARY OF THE INVENTION

PROBLEMS TO BE SOLVED BY THE INVENTION

[0006] It is an object of the present invention to provide a communication device which is a terminal configured to operate under a television white space environment and a communication control method in the same, the communication device and the communication control method in the same being capable of advantageously selecting a use frequency even
20 when the communication device moves at a high speed to a certain degree or more.

MEANS FOR SOLVING THE PROBLEMS

[0007] ~~In order to solve the aforesaid problem, a communication device being one aspect of the present invention is~~ According to a first aspect of the present invention, there is provided a

25 communication device which has a communication function unit, the communication device including: a means which specifies a first position being a geographical position where the host device exists at a first point in time and a second position being a geographical position where the host device exists at a second point in time later than the first point in time; a means which stores and retains route information being a planned moving route

frequency information list. That is, it is configured such that a frequency is selected according to the pre-obtained information on the frequencies available at the respective points so that it becomes possible to cope with the case where the device is moving at a high speed to a certain degree or more, and in addition, this becomes a selection of an advantageous use frequency appropriate for the nature of the information processing.

~~[0010] Further, a communication control method being another aspect of the present invention~~

is According to a second aspect of the present invention, there is provided a communication control method in a communication device having a communication function unit, the method including: specifying a first position being a geographical position where the host device exists at a first point in time and a second position being a geographical position where the host device exists at a second point in time later than the first point in time; storing and retaining route information being a planned moving route of the host device starting from the first position; storing and retaining an option list having options corresponding to different viewpoints regarding frequency selection policies being viewpoints in selecting a frequency to be used; transmitting the route information and the option list to a database; receiving an effective frequency information list sent from the database as information corresponding to the route information and the option list, the effective frequency information list indicating available frequencies listed in correspondence to respective points on the route indicated by the route information and the respective options; determining to which point out of the points given from the database the second position is close; selecting an appropriate option from the option list as a policy to be applied, based on a nature of information processing performed by the host device; selecting a frequency listed in correspondence to the point close to the second position out of the points given from the database and the policy to be applied, as a use frequency from the effective frequency information list; and controlling the communication function unit to make the communication function unit use the use frequency.

[0011] This communication control method is a control method conforming to the above-described communication device.

EFFECT OF THE INVENTION

[0012] According to embodiments of the present invention, it is possible to provide a communication device