SUMMARY OF INVENTION

TECHNICAL PROBLEM

[0004] Meanwhile, under a situation where positioning of a moving body is performed by using a wireless signal transmitted from a satellite, such as the GNSS, in an environment of being covered with a shield, such as a roof and a wall surface, for example, in indoors and in underground facilities, highly accurate positioning is difficult in in some cases due to the wireless signal being blocked by the shield.

[0005] In view of the above-described problem, an object of the present invention is to ensure positioning in a more preferred aspect even under a situation where it is difficult to maintain a state where a wireless signal from a satellite is regularly receivable.

SOLUTION TO PROBLEM

[0006] An information processing device according to a first aspect of the present invention includes: a first obtainer configured to obtain first information relating to an absolute position and posture in a real space of a predetermined housing; a second obtainer configured to sequentially obtain second information corresponding to a change in relative position of the housing in chronological order; and an estimator configured to estimate the absolute position in the real space of the housing at a time point at which the change in relative position of the housing

indicated by the second information has been detected with the absolute position and posture of the housing corresponding to the first information as a reference.

[0006a] An information processing method executed by an information processing device according to a second aspect of the present invention includes: a first obtaining step of obtaining first information relating to an absolute position and posture in a real space of a predetermined housing; a second obtaining step of sequentially obtaining second information corresponding to a change in relative position of the housing in chronological order; and an estimating step of estimating an absolute position in the real space of the housing at a time point at which the change in relative position of the housing indicated by the second information has been detected with the absolute position and posture of the housing corresponding to the first information as a reference.

[0006b] A program according to a third aspect of the present invention causes a computer to execute: a first obtaining step of obtaining first information relating to an absolute position and posture in a real space of a predetermined housing; a second obtaining step of sequentially obtaining second information corresponding to a change in relative position of the housing in chronological order; and an estimating step of estimating an absolute position in the real space of the housing at a time point at which the change in relative position of the housing indicated by the second information has been detected

with the absolute position and posture of the housing corresponding to the first information as a reference.

ADVANTAGEOUS EFFECTS OF INVENTION

[0007] According to embodiments of the present invention, positioning in a more preferred aspect can be ensured even under a situation where it is difficult to maintain a state where a wireless signal from a satellite is regularly receivable.

BRIEF DESCRIPTION OF DRAWINGS

[0008] [Fig. 1] Fig. 1 is a drawing for describing an outline of a technique relating to positioning.

[Fig. 2] Fig. 2 is a drawing illustrating one example of a hardware configuration of a terminal device.

[Fig. 3] Fig. 3 is an explanatory view regarding a local coordinate system.

[Fig. 4] Fig. 4 is an explanatory view regarding an estimation of an absolute position and posture of a housing.

[Fig. 5] Fig. 5 is an explanatory view regarding an estimating method of the absolute position of the housing.

[Fig. 6] Fig. 6 is an explanatory view regarding the estimating method of the absolute position of the housing.

[Fig. 7] Fig. 7 is an explanatory view regarding a determination of a reference point used for deriving absolute coordinates.