

decrease in the recall ratio. There is diversity in expression of sentence. Therefore, even a sentence to be determined that implies a hypothesis may not necessarily have a high common ratio.

[0010]

Also, the sentence retrieval device disclosed in Patent Literature 1 determines whether documents are related based on the degree of similarity between topics of the documents. However, as a method of calculating the degree of similarity, a typically well-known method is merely used. Also, even if the related documents are arranged by date, this simply makes the context of the documents clear, and the degree of similarity between the related documents is not changed. Therefore, even if the device disclosed in Patent Literature 1 is used, it is difficult to improve the implication determination performance.

[0011]

Embodiments~~Therefore, an object of the present invention seeks~~ to provide an implication determining device, an implication determining method, and an implication determining program which ~~may be capable of improving~~ the implication determination performance.

Solution to Problem

[0012]

According to a first aspect of the present invention, there is provided an implication determining device comprising:~~An implication determining device according to the present invention is provided with~~ a new fact determination means configured to determine whether a given hypothesis is a new fact indicating a first revealed fact in a hypothesis implied sentence implying the hypothesis based on a specific expression written in the hypothesis implied sentence, and an implication determination means configured to determine whether the given hypothesis is implied in a sentence to be determined that is a sentence to be determined whether the

hypothesis is included, and when it is determined that the given hypothesis is the new fact in the hypothesis implied sentence, the implication determination means compares a date and time of occurrence of the sentence to be determined and a date and time of occurrence of the hypothesis implied sentence implying the hypothesis, and determines whether the sentence to be determined implies the given hypothesis.

[0013]

According to a second aspect of the present invention, there is provided a~~An implication determining method according to the present invention~~ determininges whether a given hypothesis is a new fact indicating a first revealed fact in a hypothesis implied sentence that is a sentence implying the hypothesis based on a specific expression written in the hypothesis implied sentence, and, when it is determined that the given hypothesis is the new fact in the hypothesis implied sentence, comparinges a date and time of occurrence of the sentence to be determined that is a sentence to be determined whether the given hypothesis is included and a date and time of occurrence of the hypothesis implied sentence implying the hypothesis, and determininges whether the sentence to be determined implies the given hypothesis.

[0014]

According to a third aspect of the present invention, there is provided a~~An implication determining program according to the present invention~~ causinges a computer to execute a new fact determination process to determine whether a given hypothesis is a new fact indicating a first revealed fact in a hypothesis implied sentence that is a sentence implying the hypothesis based on a specific expression written in the hypothesis implied sentence, and an implication determination process to determine whether the given hypothesis is implied in a sentence to be determined that is a sentence to be determined whether the given hypothesis is included, wherein~~and~~, when it is determined that the given hypothesis is the new fact in the hypothesis implied sentence, in the implication determination process, a date and