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**Ide et al.**

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(54) **INFORMATION PROCESSING APPARATUS, CALCULATION METHOD, PROGRAM, AND STORAGE MEDIUM**

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This patent is subject to a terminal disclaimer.

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(51) **Int. Cl.**

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CPC ..... ***G02B 6/0065*** (2013.01); ***G06T 11/00*** (2013.01); *G02B 6/004* (2013.01); *G02B 6/0043* (2013.01); *G02B 6/0061* (2013.01); *G02F 1/133606* (2013.01)

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USPC ..... 345/30, 75, 110

See application file for complete search history.

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(57) **ABSTRACT**

An information processing apparatus, a calculation method, a program, and a storage medium for generating a uniformly distributed discrete pattern. To calculate a spatial arrangement of a plurality of elements of a discrete pattern, the plurality of elements being arranged in a spatially discrete manner, an information processing apparatus according to the present invention determines, for each of the elements, a density in an initial position given to the element from a density distribution of the elements in a region where the elements are arranged in the discrete pattern and places, for the initial position of each of the elements, a figure having a size corresponding to the density and representing a region where the element repels other elements and a movement range of the figure. The information processing apparatus minimizes an objective function, computes an optimal solution, and outputs the optimal solutions.

**10 Claims, 14 Drawing Sheets**