

positions on the gray-scale image in the character recognition processing for each of the first characters;

carrying out the character recognition
5 processing to each of the plurality of first character areas to calculate a character recognition result and an evaluation value;

determining the character recognition result of the first character and a character position of the
10 first character based on the calculated evaluation values; and

determining an optimal character spacing size from the determined character positions, and

wherein said carrying out the character
15 recognition processing for a second character comprises:

setting a plurality of second character areas for each of positions on the gray-scale image according to the optimal character spacing size;

20 carrying out the character recognition processing to each of the plurality of second character areas to calculate a character recognition result and an evaluation value; and

determining the character recognition result
25 of the second character based on the character recognition result and the evaluation value which are calculated for each of the plurality of second character areas.

30 10. A non-transitory computer readable recording medium which stores a program for making a processing unit to carry out character recognition processing to a gray-scale image obtained by picking up a character string of characters arranged in a specific direction,

35 wherein when being executed, said program makes the processing unit carry out the following

steps:

carrying out the character recognition
processing for each of first characters as N_c (N_c is an
integer equal to or more than 2) characters from an
5 end of the character string; and

carrying out the character recognition
processing for a second character different from the
first characters,

wherein said carrying out the character
10 recognition processing for each of first characters
comprises:

setting a plurality of first character areas
having various character area sizes for each of
positions on the gray-scale image in the character
15 recognition processing for each of the first
characters;

carrying out the character recognition
processing to each of the plurality of first character
areas to calculate a character recognition result and
20 an evaluation value;

determining the character recognition result
of the first character based on the calculated
evaluation values; and

determines a first optimal character area
25 size from among the various character area sizes, and

wherein said carrying out the character
recognition processing for a second character
comprises:

setting a plurality of second character areas
30 having the first optimal character area size for each
of positions on the gray-scale image;

carrying out the character recognition
processing to each of the plurality of second
character areas to calculate a character recognition
35 result and an evaluation value; and

determining the character recognition result

of the second character based on the character recognition result and the evaluation value which are calculated for each of the plurality of second character areas.

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11. A non-transitory computer readable recording medium which stores a program for making a processing unit to carry out character recognition processing to a gray-scale image obtained by picking up a character string of characters arranged in a specific direction, wherein when being executed, said program makes the processing unit carry out the following steps:

15 carrying out the character recognition processing for each of first characters as N_c (N_c is an integer equal to or more than 2) characters from an end of the character strings; and

20 carrying out the character recognition processing for a second character different from the first characters,

wherein said carrying out the character recognition processing for each of first characters comprises:

25 setting a plurality of first character areas having various character area sizes for each of positions on the gray-scale image in the character recognition processing for each of the first characters;

30 carrying out the character recognition processing to each of the plurality of first character areas to calculate a character recognition result and an evaluation value;

35 determining the character recognition result of the first character and a character position of the first character based on the calculated evaluation values; and

determining an optimal character spacing size
from the determined character positions, and

wherein said carrying out the character
recognition processing for a second character

5 comprises:

setting a plurality of second character areas
for each of positions on the gray-scale image
according to the optimal character spacing size;

carrying out the character recognition
10 processing to each of the plurality of second
character areas to calculate a character recognition
result and an evaluation value; and

determining the character recognition result
of the second character based on the character
15 recognition result and the evaluation value which are
calculated for each of the plurality of second
character areas.

positions on the gray-scale image in the character recognition processing for each of the first characters;

carrying out the character recognition
5 processing to each of the plurality of first character areas to calculate a character recognition result and an evaluation value;

determining the character recognition result of the first character and a character position of the
10 first character based on the calculated evaluation values; and

determining an optimal character spacing size from the determined character positions, and

wherein said carrying out the character
15 recognition processing for a second character comprises:

setting a plurality of second character areas for each of positions on the gray-scale image according to the optimal character spacing size;

20 carrying out the character recognition processing to each of the plurality of second character areas to calculate a character recognition result and an evaluation value; and

determining the character recognition result
25 of the second character based on the character recognition result and the evaluation value which are calculated for each of the plurality of second character areas.