

replacements of said at least one candidate word obtained by generating variants of said at least one candidate word by replacing any one character in said at least one candidate word with a chosen wild card character and leaving other characters unchanged, thereby generating  $W$  variants of said at least one candidate word of length  $W$ .

9. The method of claim 5, wherein said one or more distance one variants comprises single character wild card insertions of said at least one candidate word obtained by generating variants of said at least one word which comprise inserting a wild card character before or after any character of said at least one candidate word and leaving the other characters unchanged, thereby generating  $W+1$  variants of said at least one candidate word of length  $W$ .

10. The method of claim 2, wherein said at least one variant dictionary hash table comprises one or more of:

- a transposition hash table having entries comprising of single adjacent character transpositions of the words in the dictionary;
- a deletion hash table having entries comprising of single character deletions of the words in the dictionary;
- a transposition-replacement hash table having entries comprising of single adjacent character transpositions followed by single character wild card replacements of the words in the dictionary;
- a deletion-transposition hash table having entries comprising of single character deletions followed by transposition of characters adjacent to the just deleted character;
- a double-deletion hash table having entries comprising of a single character deletion followed by another single character deletion of the words in the dictionary;
- a deletion-replacement hash table having entries comprising of single character deletions followed by single character wild card replacements of the words in the dictionary; and
- an insertion-replacement hash table having entries comprising of a single character insertions followed by single character replacements of the words in the dictionary.

11. The method of claim 10, further comprising the step of testing said at least one candidate word against the deletion hash table, the deletions-transposition hash table, and the double deletion hash table and accumulating matches.

12. The method of claim 10, further comprising the steps of generating all adjacent character transpositions of said at least one candidate word and testing said adjacent character transpositions against transposition and deletion hash tables, and accumulating matches.

13. The method of claim 10, further comprising the steps of generating all single character deletions of said at least one candidate word and testing said single character deletions against transposition and deletion hash tables, and accumulating matches.

14. The method of claim 10, further comprising the steps of generating all single character replacements of said at least one candidate word and testing said single character replacements against the transposition-replacement, deletion-replacement, and insertion-replacement hash tables, and accumulating matches.

15. The method of claim 10, further comprising the steps of generating two character deletions of said at least one

candidate word and testing said two character deletions against the double deletion hash table, and accumulating matches.

16. The method of claim 2, wherein said at least one variant dictionary hash table comprises one or more of:

- a deletion hash table having entries comprising single character deletions of the words in the dictionary;
- a deletion-transposition hash table having entries comprising single character deletions followed by transposition of characters adjacent to the just deleted character; and
- a transposition hash table having entries comprising single adjacent character transpositions of the words in the dictionary.

17. The method of claim 16, further comprising the step of testing at least one candidate word against the deletion hash table and the deletion-transposition hash table, and accumulating matches.

18. The method of claim 16, further comprising the step of generating all adjacent character transpositions of said at least one candidate word and testing said adjacent character transpositions against the transposition and deletion hash tables, and accumulating matches.

19. The method of claim 16, further comprising the step of generating all single character deletions of said at least one candidate word and testing said single character deletions against the transposition and deletion hash tables, and accumulating matches.

20. A method as recited in claim 16, further comprising a step of generating arbitrary character transpositions of said at least one candidate word by generating all variants of the candidate word wherein any one pair of not necessarily adjacent characters are interchanged, and the remaining characters are left unchanged.

21. The method of claim 2, wherein said at least one variant dictionary hash table comprises one or more of:

- a transposition hash table having entries comprising single not necessarily adjacent character transpositions of the words in the dictionary;
- a transposition-replacement hash table having entries comprising of single not necessarily adjacent character transpositions followed by single character wild card replacements of the words in the dictionary; and
- a deletion-transposition hash table having entries comprising of single character deletions followed by transposition of characters not necessarily adjacent to the just deleted character.

22. The method of claim 21, further comprising the steps of generating all not necessarily adjacent character transpositions of said at least one candidate word and testing said not necessarily adjacent character transpositions against the transposition hash table and a deletion hash tables, and accumulating matches.

23. A system for correcting spelling of at least one candidate word, said system comprising:

- a memory; and
- at least one processor, coupled to the memory, operative to:
  - obtain at least one variant dictionary hash table based on variants of a set of known correctly spelled words, wherein said variants are obtained by applying one or more of a deletion, insertion, replacement, and transposition operation on said correctly spelled words;