



**METHOD, SYSTEM, AND PROGRAM FOR MANAGING INFORMATION ON
RELATIONSHIPS BETWEEN TARGET VOLUMES AND SOURCE
VOLUMES WHEN PERFORMING ADDING, WITHDRAWING, AND
DISASTER RECOVERY OPERATIONS FOR THE RELATIONSHIPS**

ABSTRACT

Provided are a method, system, and program for managing a relationship between one target volume (12a, 12b, ..., 12m) and one source volume (10a, 10b, ..., 10n). Information is maintained in memory (20) on an existing relationship between at least one source volume (10a, 10b, ..., 10n) and at least one target volume (12a, 12b, ..., 12m), comprising: (i) at least one element (130) representing a range of sequential data units in the volume; (ii) at least one relationship entry (140), each representing one relationship; and (iii) at least one element pointer (136) associating one element with one relationship entry. The data units represented by the element (130) are part of the relationship represented by the relationship entry (140) that the pointer (136) associates with the element (130). When a new relationship is added, a new relationship entry is added in the memory (20) representing the new relationship and one new element pointer is added in the memory (20) for each element, including data units to associate the element with the new relationship entry.

Fig 6.

