

Date: July 14, 1995
 To: ATA Working Group
 From: John Masiewicz
 Subject: Proposed Set Feature Command Change

 #001 (T) Table 14 - pg 79 0948D Revision 3

Summary:

Proposal is to change the description of the Set Features command (Section 8.24) to add two parameter values for the enabling and disabling of the automatic defect relocation feature.

Background:

Automatic Defect Relocation is a mechanism implemented in certain devices to automatically reassign grown defects during the course of normal operations. As the device encounters media defects, it will make a determination as to the nature of the defect. If it is deemed to be a grown defect and if the data can be safely written to a spare sector, the device will perform the reallocation. This is done without involving the host. This alleviates the host from having to manage the device's grown defects. The device also has better information about the defect and is able to perform validation to ensure that the host's data is properly reallocated.

This proposal is to give the host the ability to enable or disable the above feature. While testing the device, it may be desirable to have this automatic feature disabled.

Proposed Changes:

The changes only affects Table 14: Set Feature register Definition. Following is the mark-up.

The changes are marked with >>.

Table 14 - Set Features register Definitions

```

01h      Enable 8-bit data transfers (see Clause 6.2.5)
02h      Enable write cache *
03h      Set transfer mode based on value in Sector Count register
>> 04h   Enable automatic defect relocation *
33h      Disable retry *
44h      Length of vendor specific bytes on READ LONG/WRITE LONG commands
54h      Set cache segments to Sector Count register value *
55h      Disable read look-ahead feature
66h      Disable reverting to power on defaults (see Clause 8.25)
77h      Disable ECC *
81h      Disable 8-bit data transfers (see Clause 6.2.5)
82h      Disable write cache *
>> 84h   Disable automatic defect relocation *
88h      Enable ECC *
99h      Enable retries *
9Ah      Set device maximum average current
Aah      Enable read look-ahead feature
Abh      Set maximum prefetch using Sector Count register value *
Bbh      4 bytes of vendor specific bytes on READ LONG/WRITE LONG commands
Cch      Enable reverting to power on defaults (see Clause 8.25)

```

* These feature definitions are vendor specific