SCSI-2 CAM Changes Proposal

From: Jon Abilay, Henry Kannapell, and Matthew Nelson
Apple Computer, Inc.
Cupertino, CA

To: John Lohmeyer X3T9.2 Committee Chairman

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Subject: Proposed Additions and Modifications to CAM interface

Proposal 1 - Addition of Disconnect IO Function Code

We propose the addition of a new function code Disconnect IO Process, code 14h, which allows CAM clients to send a DISCONNECT message. This request is analogous to Terminate IO Process and Bus Device Reset requests, two other request which allow CAM clients to send a message asynchronously. The following text should be added to the CAM specification:

8.3.5 Disconnect IO Process Request

This function requests that an I/O operation which matches the path id /I target/ lun ID reference and currently controls the SCSI bus be interrupted via a DISCONNECT message. It can be issued on any IO request at any time.

TABLE 8-1x DISCONNECT I/O PROCESS REQUEST CCB

SIZE	DIR	
4	O	Address of this CCB
2	O	CAM Control Block Length
1	O	Function Code
1	I	CAM Status
1		reserved
1	O	Path ID
1	O	Target ID
1	O	LUN
4	O	CAM Flags (OSD)

Proposal 2 - Structural change of existing fields in the CCB header.

Regrouping of fields if CCB header.

Some OS's may want to use handles or tokens to associate drivers to SCSI connections and not necessarily via busID/targetID/LUN mechanism. We propose grouping the following byte-fields"reserved", "PathID", "TargetID" and "LUN " into a 4-byte quantity named "Connection ID" to satisfy a more general approach. In C coding terms, it can be expressed as:

```
Typedef CONNECTION_ID union
{
        ulong   CONNECT_ID;                     // OSD Connection ID
        typedef Physical_ID struct
```