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CONTENTS

FOREWORD 3
INTRODUCTION 5
1 Scope 6
2 Normative references 6
3 Terms and definitions 6
4 Notation 7
5 File operations conforming to ISO/IEC 9945-2 7
6 UDF specific file operations 8
6.1 Header and data structure 8
6.1.1 General 8
6.1.2 File entry structures in udf.h 8
6.1.3 Extended attribute structure in udf.h 10
6.1.4 Date and time structure in udf.h 10
6.1.5 Permission structure in udf.h 11
6.2 Get UDF file attribute information 11
6.2.1 Get a UDF file entry 11
6.2.2 Get UDF extended attribute 12
6.3 Set UDF file attribute information 12
6.3.1 Set a access permission 12
6.3.2 Set a date and time 13
7 Security extension 14
7.1 General 14
7.2 Header and data structure 14
7.2.1 Header file 14
7.2.2 Access log descriptor structure in the udfse.h header file 14
7.3 Log operation 14
7.3.1 General 14
7.3.2 Get a log 14
7.4 Licensing operation 15
7.4.1 Get a license list 15
7.4.2 Add a license 15
7.4.3 Delete a license 16
7.4.4 Set a license 16

Table 1 – File operations conforming to ISO/IEC 9945-2 8
Table 2 – udfent structure 9
Table 3 – udftag structure 9
Table 4 – timestamp structure 10
Table 5 – regid structure 10
Table 6 – udfxattr structure 10
Table 7 – udftime structure 10
Table 8 – aldesc structure 14
Table 9 – envspec structure 14

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MULTIMEDIA DATA STORAGE – APPLICATION PROGRAM INTERFACE FOR UDF BASED FILE SYSTEMS

FOREWORD

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IEC 62291, which is a technical report has been prepared by IEC technical committee 100: Audio, video and multimedia systems and equipment.

This second edition cancels and replaces the first edition, published in 2002, and constitutes a technical revision.

The significant changes with respect to the first edition are the following:

- reference document ISO/IEC 9945-1:1990 is replaced with ISO/IEC 9945-2:2003.
- reference document UDF 2.00 is replaced with UDF 2.01.

The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
100/1452/CDV	100/1499/RVC

Full information on the voting for the approval of this technical report can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

INTRODUCTION

Interchangeable storage media have been widely employed for information interchange; the following extensions to their media format should therefore be standardized:

a) additional facilities including security (access control, originality management, etc.);

b) volume and file structure supporting the facilities;

c) API (Application Program Interfaces) to the volume and file structure.

For a number of disc media, ISO/IEC JTC1/SC15 developed a generic standard of volume and file structure and it was actually used for rewritable, recordable and read-only DVD and recordable CD file systems with some subsetting by OSTA (Optical Storage Technology Association). The subsetting specification is called a UDF (Universal Disk Format).

Additional facilities and an API for the UDF have been discussed in OITDA (Optoelectronic Industry and Technology Development Association). OITDA drafted their specifications and submitted them to JISC (Japanese Industrial Standard Committee). METI (Ministry of Economy, Trade and Industry, Japan) approved them and JSA (Japanese Standards Association) published them in July 2001 as

a) JIS/TR X 0040:2001 Security Extension to Universal Disk Format (UDF);

b) JIS/TR X 0041:2001 Application Program Interface for UDF based File Systems.

IEC/TC100 National Committee of Japan then submitted the English version of JIS/TR X 0041:2001 to IEC/TC100.

MULTIMEDIA DATA STORAGE – APPLICATION PROGRAM INTERFACE FOR UDF BASED FILE SYSTEMS

1 Scope

This Technical Report (TR) specifies an application program interface (API) for reading and writing the files which conform to the Universal Disk Format (UDF) ®[1] specification revision 2.00 developed by the Optical Storage Technology Association (OSTA) and its security extension.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 9945-2:2003, *Information technology – Portable Operating System Interface (POSIX) – Part 2: System Interfaces*

Universal Disk Format (UDF) Specification Revision 2.01, Optical Storage Technology Association (OSTA), 2000

Secure UDF, Revision 1.00, OSTA, 2002

JIS/TR X 0040:2001, *Security Extension to Universal Disk Format (UDF)*

NOTE JIS/TR X 0040 was translated into English under the title *Secure UDF Specification* (2002), see reference above.

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[1] Universal Disk Format (UDF) is a registered trademark developed by the Optical Storage Technology Association. This information is given for the convenience of users of this document and does not constitute an endorsement by IEC of the product named. Equivalent products may be used if they can be shown to lead to the same results.