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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 30542-2014

**Document management -- Monitoring and verification of
information stored on 130 mm optical media**

文件管理 130mm光盘存储信息的监测和验证

(English Translation)

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard uses redrafted Law Amendment uses ISO 23868:2008 "document management 130mm discs store information monitoring and inspection Card "(in English).

This standard and ISO 23868:2008 technical differences are as follows.

--- To modify the use of international standards GB/T 20225-2006 "Electronic Imaging Glossary" instead of ISO 12651.

This standard and ISO 23868:2008 in comparison, made the following editorial changes.

--- Re-write the foreword;

--- In the "scope" section, increase the applicability of the standard formulation;

--- Fixed Appendix A of an editing error (relative humidity of 3% to 30%).

This Standard Document Imaging Technology by the National Standardization Technical Committee (SAC/TC86) and focal points.

Introduction

Now many organizations are using the CD-ROM for long-term storage of information. Its premise is to assume that the light has been shown to select for recording for this purpose the disc is qualified. Therefore, it is important to be able to verify that the data has been properly recorded and maintained within the required deadline Readable. Previous international standards explicitly provides for the exchange requirements, and the disc life prediction method, but does not include write data Authentication method quality.

Life is well received by media decay also subject to technical obsolescence restrictions. Exchangeable need to be verified on a regular basis to keep the information in an existing

record Recoverable on the recording medium. Users can take some maintenance strategies, such as making a copy of the archive, backup or as a master copy and a copy of the daily use for access to the disk to prevent unexpected failure or accidental use. Hardware support life cycle normally 5 years to 10 years, the technology life cycle is usually 20 years. Therefore, the required recording with a longer life cycle, it is possible to have each 10 years to 20 years will be transferred to the upgraded platform.

It recommends to assess the long-term storage as disc. Between different media manufacturers produce disc, media and even the same manufacturer Between the production of discs, in life there are also significant differences. Compared with the high-quality recording of the disc, the initial disc its poor quality Decay much faster. Poor initial quality of the disc does not have enough margin to ensure that before the next scheduled inspection, the error will not Unable to reach the level of recovery, and for the archive disk, it is to avoid such a situation. This means that high-quality initial and final record Students maintain the state of the disk, it is expected to have a long life.

Embedded in the disc drive and take advantage of powerful cyclic redundancy check (CRC) error correction system that can mask the presence of decay. in the absence of a standard drive, the functionality does not allow users a simple way to verify the quality of the information recorded on a particular disk. The standard Quality control policy shall apply mutatis mutandis, be able to identify non-destructive decay, in order to take timely and effective corrective action to the user.

File Management

Monitoring and verification 130mm discs store information

1 Scope

This standard specifies the test methods to determine the quality of the data recording medium, and provides a standardized, end-user organizations to press these specifications to monitor the quality of data and to monitor whether the drive has been in line with, and (or) the margin of error for medium manufacturer level determined requirements.

This standard defines the error rate monitoring capacity and monitoring methods for use in production environments 130mm disc to ensure that the whole pre-disc the data can be read out of life.

This standard applies to 130mm monitoring and verification of optical storage of information. Monitoring and verification of other specifications refer to the optical disc for storing information carried out.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 20225-2006 Electronic imaging - Vocabulary (ISO 12651:1999, MOD) ISO/IEC 11976 Information technology on 130mm rewritable and write once read many ultra-high density optical (UDO) for digital According switching capacity. 60 gigabytes a second-generation [Informationtechnology-Datainterchangeon130mmre- per disc writbleandwrite-once-read-manyultradensityoptical (UDO) diskcartridges-Capacity. 60Gbytes percartridge-Secondgeneration] ISO/IEC 17345 Information technology on 130mm rewritable and write once read many ultra-high density optical (UDO) for digital According switching capacity. 30 gigabytes per disk the first generation [Informationtechnology-Datainterchangeon130mm rewritableandwriteonceread manyultradensityoptical (UDO) diskcartridges-Capacity. 30 Gbytespercartridge-Firstgeneration]

3 Terms and Definitions

GB/T 20225-2006, ISO/IEC 17345 and ISO/IEC 11976 define the following terms and definitions apply to this file.

End of life; EOL Exchangeable loss, resulting in no information can be reliably retrieved.

Test Method 4

4.1 General

It requires the use of an error correction code to correct the disc inevitable defects and decay during the normal life. Based on knowledge of this fact, the present Standard for determining the quality of the data recording medium approach. At the time of writing data, the data written to the system should be verified. That