

产权组织标准委员会（标准委）

第十二届会议

2024 年 9 月 16 日至 19 日，日内瓦

关于修订产权组织标准 ST. 91 的提案

立体工作队牵头人编拟的文件

概 述

1. 立体工作队建议修订产权组织标准 ST. 91。该拟议修订包括增加一个新附件和删除 X3D 的定义。

背 景

2. 立体工作队负责在第 61 号任务框架下修订产权组织标准 ST. 91，该任务说明如下：

“确保对产权组织标准 ST. 91 进行必要的修订和更新，包括检索立体模型和立体图像的方法。”

3. 虽然产权组织标准 ST. 91 提供了文件格式 X3D 的定义，但它并不是该标准推荐的文件格式之一。将 X3D 排除的原因是认为其并未得到广泛使用，因此不符合用于确定是否纳入文件格式的选择标准。为提高透明度，工作队的一些成员建议提供用于评估文件格式的选择标准完整清单，其结果就是新拟议的产权组织标准 ST. 91 附件。此外，认为 X3D 文件格式的定义也是多余的。

产权组织标准 ST. 91 的拟议修订

4. 立体工作队编写了一份修订产权组织标准 ST. 91 的提案，供标准委审议并酌情批准，所有改动均使用跟踪修改在本文件附件中完整标示。附件中，凡注明删除线的内容表示删除，注明下划线的内容表示增加。

5. 对产权组织标准 ST. 91 的拟议修改可总结如下：
 - 删除第 3 (n) 段中的 X3D 定义：“X3D——虚拟现实模拟语言 (VRML) 的后继，一种开放的 ISO 标准 XML 格式”；
 - 在文件中的参考文献部分添加相关标准的链接；
 - 在第 6 段中提及新附件；以及
 - 增加新附件：用于选择推荐 3D 文件格式的标准列表。
6. 由于该标准没有版本号，因此不必建议新版本号，认为发布日期足以作为唯一参考。

7. 请标准委员会：

(a) 注意本文件及本文件附件的内容；

(b) 审议并批准上文第 5 段所述并转录于本文件附件的对产权组织标准 ST. 91 的拟议修订。

[后接附件]

STANDARD ST. 91

RECOMMENDATIONS ON DIGITAL THREE-DIMENSIONAL (3D) MODELS AND 3D IMAGES

*Proposal presented for approval by the Committee on WIPO Standards (CWS)
at its twelfth session*

INTRODUCTION

1. This Standard provides recommendations for Intellectual Property Offices (IPOs) and other interested parties that manage, store, process, exchange or disseminate IP data using digital three-dimensional (3D) models and 3D images.
2. This Standard has the following objectives:
 - (a) determination of formats that are available, compatible or interoperable with different software used by applicants in order to facilitate their efforts to prepare application materials before filing;
 - (b) reducing the time of IP application processing by IPOs;
 - (c) facilitating IP application filing to different IPOs due to adoption of recommended formats among IPOs;
 - (d) harmonization of requirements for data exchange on subjects for IP rights protection with digital 3D visual representations among IPOs and other organizations; and
 - (e) set of requirements for the publication of information on subjects for IP rights protection with digital 3D visual representations.

DEFINITIONS

3. For the purposes of this Standard, unless otherwise specified:
 - (a) 3D model – An electronic file that is created by specialized software, for mathematically representing the surface of an object's visual representation in three dimensions;
 - (b) 3D Images – Digital images that represent objects displayed in three dimensions such as 3D photos and stereoscopy;
 - (c) CAD – Computer Aided Design;
 - (d) 3D PDF – A PDF document that contains 3D models;
 - (e) IGES – Initial Graphics Exchange Specification;
 - (f) OBJ – An open geometry vertex file format used for CAD and 3D printing;
 - (g) MOL/CDX – A text-based chemical file format that describes molecules and chemical reactions;
 - (h) PDF – The Portable Document Format is a file format developed by Adobe;
 - (i) Raster image – An image that is composed of a map of points (pixels), referred to as a bitmap. Typical file formats for raster images include JPEG, TIFF, PNG and BMP;
 - (j) STL – Standard Tessellation Language – a file format native to the stereolithography CAD software created by 3D Systems;
 - (k) STEP – Standard for the Exchange of Product model data – an open ISO Standard which can represent 3D objects in Computer-aided design (CAD) and related information;
 - (l) U3D – Universal 3D (U3D) is a compressed file format standard for 3D computer graphics data;
 - (m) Vector graphics – An image file that is composed of shapes formed of mathematical formulas and coordinates on a 2D plane. As opposed to raster images, vector graphics have the property of scaling infinitely without any degradation of quality; and

