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**ISO/IEC JTC 1/SC 29/WG 3**

**CODING OF MOTING PICTURES AND AUDIO**

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**Title: Clarification of vsindex operator in CFF2**

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## Introduction

Editorial changes along the following lines have been quite reasonably requested by Behdad Esfahbod on behalf of Google. They clarify that the default *vsindex* value for a CharString is the one specified in its PrivateDict, and when there no *vsindex* operator its default value is 0. This is currently the case and any implementation that doesn't treat the values this way will be broken with existing fonts, but the language in the specification can be interpreted in in other ways.

## Changes

In section 5.3.3.9.3 (PrivateDict variation operators):

After the sentences

When used within a PrivateDICT, it has effect not only for variation of values specified by PrivateDICT keys but also for variation in all CharStrings associated with that PrivateDICT. However, a *vsindex* operator can also be used within a CharString, taking precedence over the *vsindex* specified in the PrivateDICT.

this sentence is added

When not used within a PrivateDICT, a default *vsindex* value of 0 applies under both circumstances.

In section 5.3.3.11.3 (Variation Operators):

These sentences are deleted:

By default, the first ItemVariationData structure (index 0) will be used. The *vsindex* operator can be used for glyphs that require a different list of regions.

and the sentences

The *vsindex* key may be used in a PrivateDICT to select a different list of regions for a group of glyphs associated with that PrivateDICT. *vsindex* may also be used in a CharString to select the list of regions for that glyph. When used in a CharString, it overrides a setting in the associated PrivateDICT.

become

The *vsindex* key may be used in a PrivateDICT, in which case it selects the regions for a *blend* operator in the PrivateDict and any CharString associated with that PrivateDict. When used in a CharString it overrides value in the PrivateDict for blends in that CharString. When there is no explicit *vsindex* operator a default value of 0 applies, corresponding to the first ItemVariationData structure.