HEVCAdvance®

**Software Policy
Effective September 20, 2017**

Summary

This presentation references and should be read with HEVC Advance's September 20, 2017 updated Software Policy, which replaces all prior Policy Statements (original issued December 1, 2016).

This presentation offers examples of the operation of the Software Policy.

A synopsis of each case precedes a flow diagram of the case.

HEVC Advance reserves the right to (a) modify this policy at any time; (b) require a legal entity to execute a PPL to enjoy the benefits of this policy, and (c) limit the application of the policy to a legal entity solely to that period after execution of a PPL. Specifically, this policy does NOT apply to (i) operating system, browser, and other major software providers, or (ii) commercial content distributors, unless specifically included as an addendum to an executed PPL.

Please contact us at licensing@hevcadvance.com if you have any questions.

Case 1 Synopsis
Royalty Already Paid for HEVC in Consumer Device

The **Case 1** diagram on the next page depicts HEVC Advance's general licensing policy as described in Section II of the Software Policy, reprinted below.

In brief, if one or more HEVC Codecs are included in a consumer device at time of its initial sale to a consumer, and a royalty is paid on the sale, then generally additional HEVC Codecs may be incorporated in or downloaded to such device without the obligation to pay additional royalties (other than for stand-alone software under Section IV.D).

SECTION II: CURRENT LICENSE REQUIREMENTS

Under the HEVC Advance Patent Portfolio License (PPL), a royalty must be paid for HEVC decoders and/or encoders included in (i) *consumer devices* and (ii) *software products,* as well as certain updates/upgrades to such software products (hereinafter "device royalty"). These software products may include, for example, browsers, media players, operating systems and various software applications.
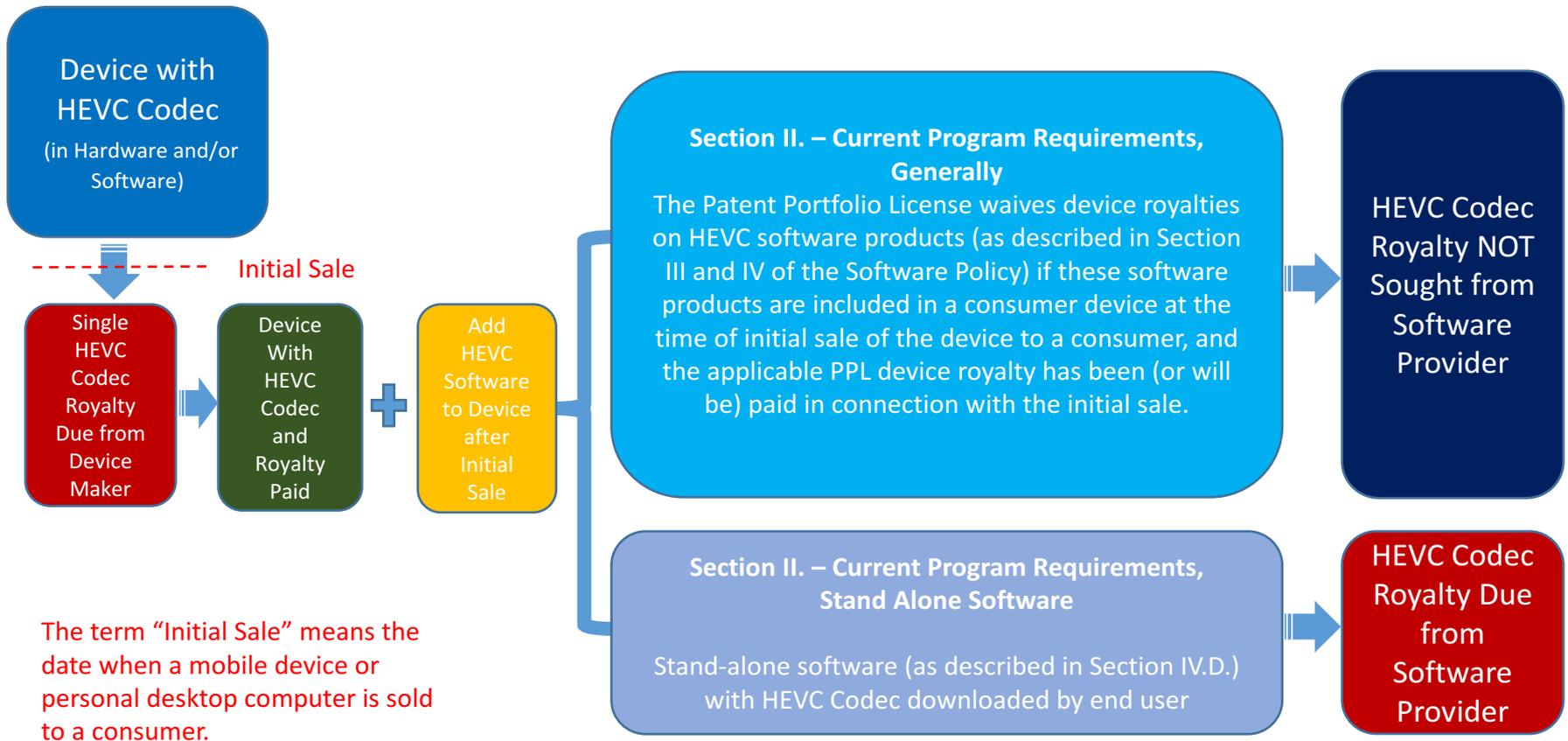
However, under the PPL, **only one royalty** is due for all HEVC decoders or encoders included in a consumer device at the time of initial sale to the end user. Therefore, any number of HEVC software products may be included in a consumer device at initial sale without incurring additional royalties, if the applicable device royalty has been (or will be) paid.

In addition, and separate from this policy and under an executed PPL, HEVC Advance may agree to waive royalties on certain HEVC software products **if** those software products are installed on a consumer device after the initial sale of such device and the applicable PPL device royalty has already been paid.

Footnotes excluded.

Case 1
HEVC Codec in Device at Initial Sale (Any Time)

Device with HEVC Codec
(in Hardware and/or Software)

---- *Initial Sale*

Single HEVC Codec Royalty Due from Device Maker

→ **Device With HEVC Codec and Royalty Paid**

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Add HEVC Software to Device after Initial Sale

The term "Initial Sale" means the date when a mobile device or personal desktop computer is sold to a consumer.

Section II. – Current Program Requirements, Generally
The Patent Portfolio License waives device royalties on HEVC software products (as described in Section III and IV of the Software Policy) if these software products are included in a consumer device at the time of initial sale of the device to a consumer, and the applicable PPL device royalty has been (or will be) paid in connection with the initial sale.

→ **HEVC Codec Royalty NOT Sought from Software Provider**

Section II. – Current Program Requirements, Stand Alone Software

Stand-alone software (as described in Section IV.D.) with HEVC Codec downloaded by end user

→ **HEVC Codec Royalty Due from Software Provider**

Cases 1 Examples

Example 1.A: XYZ Company releases a new MilkyWay mobile phone that includes an HEVC hardware decoder. XYZ takes a license to the HEVC Advance patent pool and pays royalties on its MilkyWay phones. A MilkyWay phone user later downloads a MMM Company software app to watch HEVC video on her phone, where the app includes a full HEVC software decoder that can execute on a general purpose CPU. HEVC Advance would not seek a royalty from MMM on such software app, for two independent reasons: First, XYZ has already paid a royalty on a HEVC decoder in the MilkyWay phone, and, second, the HEVC software decoder included in the MMM app falls within this announced software policy. (Note: Execution of a PPL would be required if MMM also sold HEVC devices, stand-alone software and/or commercial HEVC content with royalties due in excess of the $25K annual waiver ($6250/qtr).

Example 1.B: XYZ Company releases a new StarBurst laptop that includes an HEVC hardware decoder in its GPU. A StarBurst user later downloads ABC Company's sophisticated stand-alone video editing software, StarDirector, which includes its own HEVC decoding capability and has a suggested retail price of $50 or can be obtained on a subscription basis for $5/month. HEVC Advance would require ABC to license and pay royalties to the HEVC Advance patent pool on its StarDirector product. (Note: if the price was less than $45 or 3.75/month no royalty would be due.)

Cases 2 and 3 Synopses
Software Policy for Mobile Devices and Desktop PCs

The **Case 2** and **Case 3** diagrams (starting the page after next) depict HEVC Advance's Software Policy that applies to Mobile Devices and Desktop Personal Computers, reprinted on the next page.

Case 2 applies to devices sold before December 1, 2016. **Case 3** applies to devices sold on or after December 1, 2016. The operative difference between the cases is as follows:

- **Case 2**: For devices sold prior to December 1, 2016, there generally are no limitations on Section III application software for which HEVC Advance will **not seek a license and corresponding royalty payment** (other than stand-alone software under Section IV.D). That is, Section IV.C, which excludes from the policy application software that is downloaded to a device automatically or upon prompt to the end user, or otherwise provided by or on behalf of, or with the acknowledgement or cooperation of, the device manufacturer (or by third parties under certain circumstances), does not apply to devices sold prior to December 1, 2016.

- **Case 3**: For devices sold on or after December 1, 2016, however, Section III application software subject to the Software Policy excludes any software described under Section IV.C of the policy (as well as stand-alone software under Section IV.D). That is, unless a royalty was paid on the initial sale of the device, HEVC Advance will seek a royalty from a provider of application software that is downloaded to the device automatically or upon prompt to the end user, or otherwise provided by or on behalf of, or with the acknowledgement or cooperation of, the device manufacturer (or by third parties under certain circumstances). This limitation is intended to prevent device companies from purposely trying to exploit this policy to circumvent their royalty obligations for new devices. **But a software provider that is NOT working with a device manufacturer would not be impacted by this exclusion.**

New Software Policy for Mobile Devices and Desktop PCs

SECTION III: SOFTWARE POLICY – HEVC SOFTWARE PRODUCTS FOR WHICH HEVC ADVANCE WILL NOT SEEK A LICENSE

HEVC Advance will not seek a license on a software product that performs HEVC decoding, encoding, and related functions where that software product is:

(i) application layer software, or software encoding or decoding libraries used by application layer software, where the encoding or decoding is fully executed in software (i.e., without specialized hardware support) on a general purpose CPU; and

(ii) downloaded to a mobile device or desktop personal computer after the initial sale of such device; and

(iii) intended for personal, and not commercial, use by the user of such device; and

(iv) not excluded from this software policy under Section IV below; and

(v) not offered by an entity to which this software policy does not apply under Section V below.

Examples of such software products may include web browsers, personal video conferencing software and video players provided by various internet streaming video distributors or software application providers.
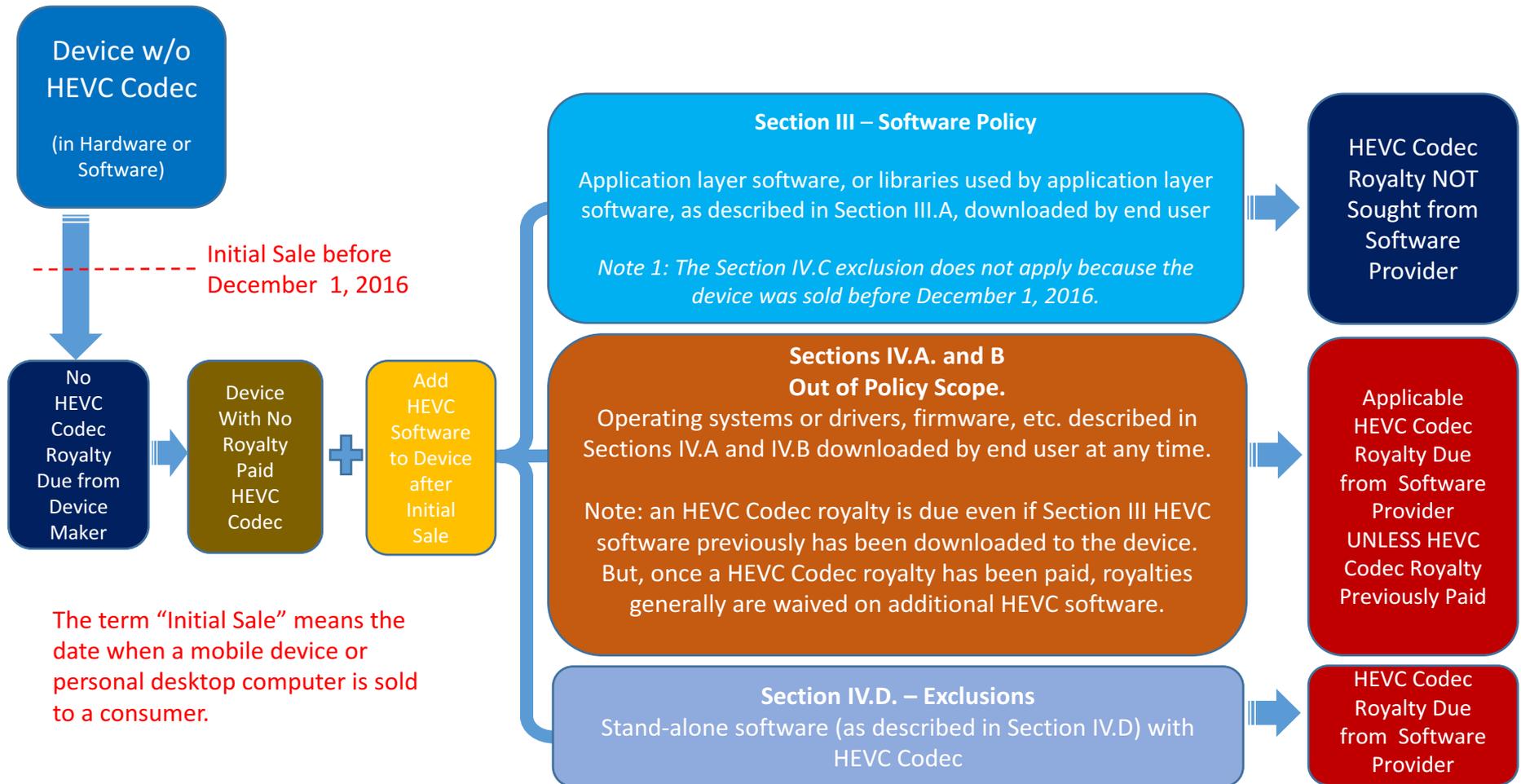
SECTION IV: HEVC SOFTWARE PRODUCTS THAT DO NOT FALL UNDER THE SOFTWARE POLICY

HEVC Software to which this policy does not apply includes any of the following:

A. Operating systems.

B. Drivers, libraries, firmware or other software that enables hardware on a device, which hardware is specifically designed, in whole or in part, to decode and/or encode HEVC content, in whole or in part.

C. Software, and updates/upgrades to software that was loaded on or bundled with a mobile device or desktop personal computer at the time of initial sale of such device, which software or updates/upgrades:

    (i) add or enable HEVC encoding or decoding functionality in software, and

    (ii) are downloaded to a mobile device or desktop personal computer that was sold on or after December 1, 2016, and for which ***no device royalty was paid***, and

    (iii) are downloaded to such mobile device or desktop personal computer either:

        (a) automatically, upon prompt to the end user, or otherwise by or on behalf of, or with the acknowledgement or cooperation of, the mobile device or desktop personal computer manufacturer, or

        (b) by or on behalf of, or with the acknowledgement or cooperation of, the manufacturer of another device, to provide HEVC encoding or decoding functionality on the mobile device or desktop personal computer for use with video or other digital content captured or received through such other device.

D. Application layer software that is sold as a stand-alone software product marketed as providing advanced HEVC video functions, where such software product is offered for sale with a published or suggested retail price of $45.00 or more, or on a subscription basis for $3.75 per month or more.

Case 2
Mobile Device or Desktop PC with NO HEVC Codec Sold Before December 1, 2016

Device w/o HEVC Codec

(in Hardware or Software)

- - - - - - - - Initial Sale before December 1, 2016

No HEVC Codec Royalty Due from Device Maker

Device With No Royalty Paid HEVC Codec

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Add HEVC Software to Device after Initial Sale

The term "Initial Sale" means the date when a mobile device or personal desktop computer is sold to a consumer.

Section III – Software Policy

Application layer software, or libraries used by application layer software, as described in Section III.A, downloaded by end user

Note 1: The Section IV.C exclusion does not apply because the device was sold before December 1, 2016.

→ **HEVC Codec Royalty NOT Sought from Software Provider**

Sections IV.A. and B
Out of Policy Scope.
Operating systems or drivers, firmware, etc. described in Sections IV.A and IV.B downloaded by end user at any time.

Note: an HEVC Codec royalty is due even if Section III HEVC software previously has been downloaded to the device. But, once a HEVC Codec royalty has been paid, royalties generally are waived on additional HEVC software.

→ **Applicable HEVC Codec Royalty Due from Software Provider UNLESS HEVC Codec Royalty Previously Paid**

Section IV.D. – Exclusions
Stand-alone software (as described in Section IV.D) with HEVC Codec

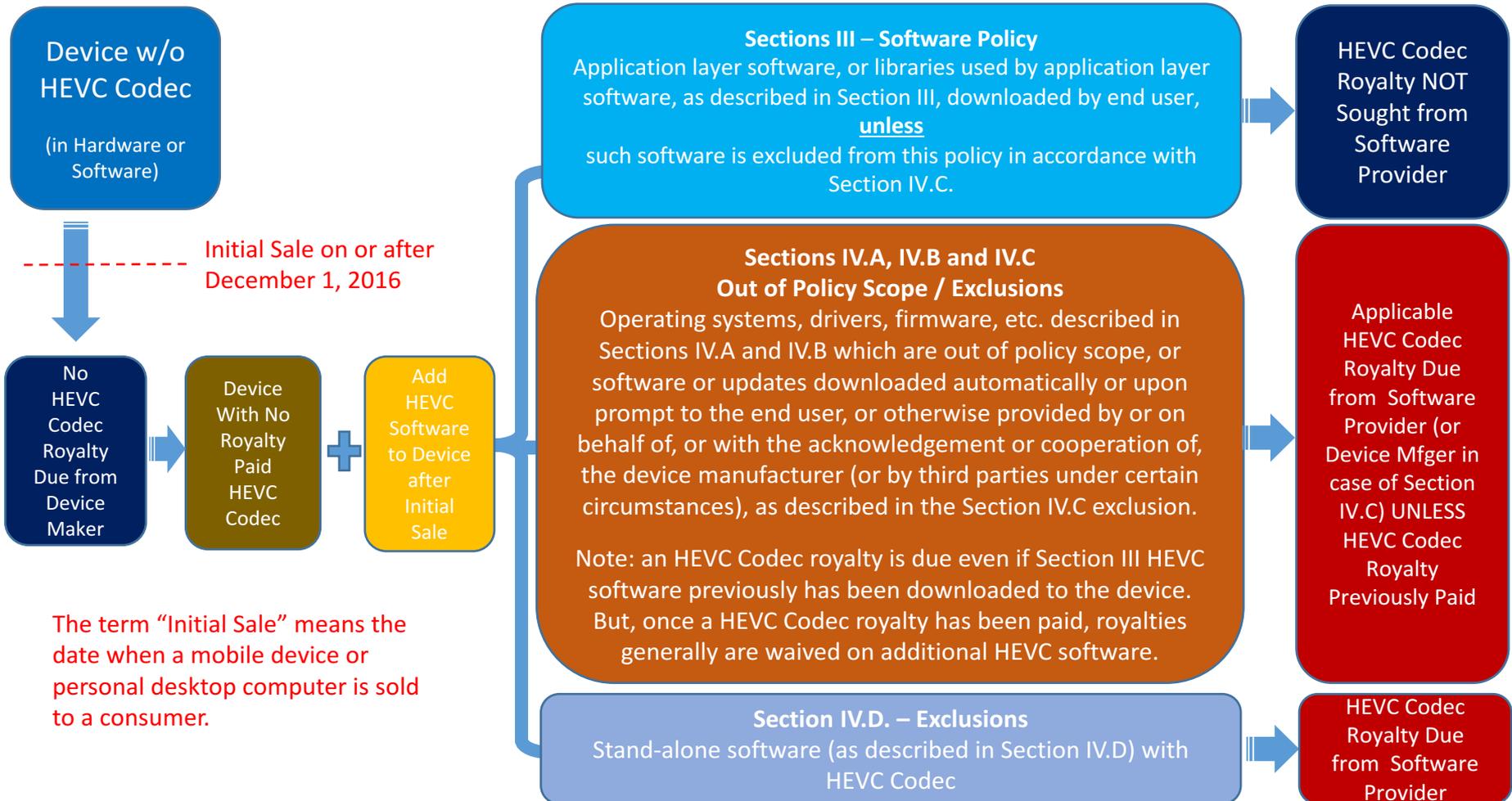→ **HEVC Codec Royalty Due from Software Provider**

Cases 2 Examples

Example 2.A: WXYZ Company sold over 10MM Asteroid-Pad tablets prior to December 1, 2016 that do not include any HEVC functionality at all. WXYZ would not require a license to the HEVC Advance patent pool for those sales and, thus, would not pay royalties on such Asteroid-Pad tablets. An Asteroid-Pad tablet user later downloads one or more software apps to watch and record HEVC video on his Asteroid-Pad tablet, where the software apps include a full HEVC software encoder and decoder that executes on a general purpose CPU. HEVC Advance would not seek a license or royalty from the software app provider, whether such provider was WXYZ or a third party unaffiliated with WXYZ.   (Execution of a PPL would be required by such software provider if such company also sold HEVC devices, stand-alone software and/or commercial HEVC content with royalties due in excess of the $25K annual waiver ($6250/qtr).)

Example 2.B: WXYZ Company sold over 5MM Nova laptops prior to December 1, 2016. The laptops do not include any HEVC functionality at all. A Nova user downloads a new STAR Company operating system to his laptop, where the STAR OS includes a full HEVC software decoder. HEVC Advance would require STAR to license and pay royalties to the HEVC Advance patent pool on its STAR operating system. (Note: Operating system providers that agree to include HEVC capability in their operating systems may be eligible for certain royalty discounts or waivers for OS upgrades to existing devices.)

Case 3
Mobile Device or Desktop PC with NO HEVC Codec Sold On/After December 1, 2016

Device w/o HEVC Codec

(in Hardware or Software)

- - - - - Initial Sale on or after December 1, 2016

No HEVC Codec Royalty Due from Device Maker

→ Device With No Royalty Paid HEVC Codec

+ Add HEVC Software to Device after Initial Sale

The term "Initial Sale" means the date when a mobile device or personal desktop computer is sold to a consumer.

Sections III – Software Policy
Application layer software, or libraries used by application layer software, as described in Section III, downloaded by end user, **unless** such software is excluded from this policy in accordance with Section IV.C.

→ **HEVC Codec Royalty NOT Sought from Software Provider**

Sections IV.A, IV.B and IV.C
Out of Policy Scope / Exclusions
Operating systems, drivers, firmware, etc. described in Sections IV.A and IV.B which are out of policy scope, or software or updates downloaded automatically or upon prompt to the end user, or otherwise provided by or on behalf of, or with the acknowledgement or cooperation of, the device manufacturer (or by third parties under certain circumstances), as described in the Section IV.C exclusion.

Note: an HEVC Codec royalty is due even if Section III HEVC software previously has been downloaded to the device. But, once a HEVC Codec royalty has been paid, royalties generally are waived on additional HEVC software.

→ **Applicable HEVC Codec Royalty Due from Software Provider (or Device Mfger in case of Section IV.C) UNLESS HEVC Codec Royalty Previously Paid**

Section IV.D. – Exclusions
Stand-alone software (as described in Section IV.D) with HEVC Codec

→ **HEVC Codec Royalty Due from Software Provider**

Cases 3 Examples

Example 3.A: QXW Company sells STAR1-phones after December 1, 2016 that do not include HEVC hardware capability. DEF Company makes available to STAR1-phone customers after purchase application software that provides a full HEVC software decoder that executes on a general purpose CPU. QXW cooperated with DEF to make such software available. A STAR1-phone user downloads DEF's software decoder to enable HEVC support in her STAR1-phone. HEVC Advance would seek a license or royalty from DEF, or QXW.   (Note: IF QXW was NOT involved with or cooperated with DEF in any way, then HEVC Advance would NOT seek a license or royalty from DEF.)

Example 3.B: QXW Company sells MoonBeam-phones after December 1, 2016 that include a new SunRay-processor with HEVC hardware capability, but which HEVC functionality is not accessible by any applications running on the Moonbeam-phone upon initial purchase. DRIVER Company makes available to Moonbeam-phone customers software that enables the HEVC hardware. A Moonbeam-phone user downloads DRIVER'S software to enable HEVC hardware capability in her Moonbeam-phone. HEVC Advance would require DRIVER to license and pay royalties to the HEVC Advance patent pool in the event that QXW was not licensed by HEVC Advance and paying royalties for such MoonBeam-phones either at initial sale or when the HEVC capability was enabled. (Note1: Unless the HEVC functionality was encrypted with control maintained by QXW, the HEVC royalty would have been due upon initial sale by QXW.)   (Note 2: Since royalties were not paid by QXW, DRIVER would be required to license and pay royalties irrespective of whether QXW was involved with or assisted DRIVER.)

Cases 3 Examples (cont.)

Example 3.C: TXY Company sells a terrestrial UBS plug-in (without HEVC capability) for use with a personal computer. TXY also provides a software app with a HEVC software decoder that executes on a general purpose CPU that decodes the signal received from the plug-in on the personal computer. HEVC Advance would require a license and royalty from TXY for the software application provided for use in conjunction with the device.

Example 3.D: KLM sells Action branded video cameras without HEVC capability upon initial purchase. KLM also distributes a software application, with HEVC encode/decode capability that executes on a general purpose CPU, for installation on a mobile phone and/or personal computer for use with video captured through such video camera. HEVC Advance would require a license and royalty from KLM for the software application.

Thank You.

This material is a brief high-level summary and overview of certain terms for information purposes only and does not create any contract or agreement. The actual terms are those contained in the HEVC Patent Portfolio License. This summary is subject to change at any time at the discretion of HEVC Advance.

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