Cast

███████████

Facebook
By email to: ███████@fb.com

25/04/18 (Wednesday)

Dear ████

SafeCast

Thank you for responding to me. Owing to the fact that, to date, we have been speaking solely to regulated commercial broadcasters (ITV, SKY etc) and not to social media companies you are probably currently unaware of SafeCast, our technology and our granted patents. This letter is to rectify this situation in the light of a very useful meeting we had last week with ██████████ at the Office of the Children's Commissioner. ████ has asked us to focus our activities over the next few months on the possible use of our technology by social media companies (Facebook, YouTube, Instagram, WhatsApp etc) as a way of protecting children from harmful video material. Social media companies will be able to implement controls over their services in a form which, we believe, would be acceptable to the UK Minister for Health, the Rt Hon Jeremy Hunt MP, without censorship.

What is SafeCast

SafeCast is a dual-use technology which enables the automatic filtering of inappropriate content away from children and vulnerable people on televisions and the internet. We originally developed our technology to protect children from watching inappropriate material on TV in accordance with the UK broadcasting standards laid down by Ofcom in the TV Watersheds. We came up with the concept of labels in video content and advertisements which could then be filtered against. However to ensure that we could get patents granted for our invention we restricted the claims in the patents to the use of labels in advertising and their automatic processing. Our patents have since been granted in the US and the UK.

As we developed the technology it occurred to us that the same software to be used in labelling video advertising could be used in labelling video content generally. However since this was outside of the claims of the patents it would be possible to offer our technology as a free standard means of marking up video content.

This is what we mean by dual-use: SafeCast can be used to label ALL video content but it only falls within the scope of its patents when the labels are used in video advertisements. When SafeCast is used to label video content which is not advertising its use is free.

SafeCast has solved one of the fundamental problems of the internet - how to make video content safe for children of all ages and stages of development - without censorship. In doing so we are establishing the SafeCast HeadCodes as the basis of a new global standard for metadata labelling in the video

industries. Our solution will fundamentally change the markets in child protection technology, broadcasting and the internet. It will allow parents to give their children tablets and mobile phones safe in the knowledge that they will not be harmed through seeing inappropriate video content - without censorship.

SafeCast's approach to protecting children

Our work established that it was possible to classify ALL video into just six categories which we call the SafeCast HeadCodes. We found that this was, in fact, what British commercial television had impliedly been doing for the past sixty years in complying with the TV Watershed requirements originally laid down by the Independent Broadcasting Authority and now by Ofcom.

In December 2016 we took our work to the DCMS and explained this to their civil servants. They asked us to build a demonstrator to show how all video content could be labelled with just six codes. So we built one and put it on the SafeCast (www.safecast.co.uk) website.

At this time we also found that the same six codes could be used in advertising for similar purposes. It is illegal to advertise many products to children - gambling, medicines, alcohol etc. So the SafeCast HeadCodes could be used to automatically filter inappropriate advertisements away from children of different ages and maturity. This meant that it would be possible to automate a key aspect of the Ofcom and ASA regulations on advertising. We built a second demonstrator which showed how this worked with advertisements and put this on the SafeCast website too.

Following on from developing the demonstrators we then took our proposals to the DPP (Digital Production Partnership) which is the industry body set up by the BBC, ITV and Channel 4 *"to make the move to fully digital, global, internet-enabled content creation..."*. They liked our proposals and suggested that SafeCast could become a GLOBAL standard through an American organisation called EIDR (the Entertainment Identity Data Registry) whose members include Google, ITV, Sony, Disney and many, many others.

We are now in discussions with the Chief Technical Architect at EIDR finalising the details on how our coding system could indeed be incorporated within the EIDR specification. On 1st July 2018 we will be joining EIDR as a member to build our coding and technology into this global labelling broadcasting standard for its release this autumn. EIDR is based on the Digital Object Identifier (DOI) system. DOI is now an ISO Standard (ISO 26324) and this means that the SafeCast HeadCodes will be embedded with the implementation of an ISO standard.

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www.safecast.co.uk

Labelling and Filters

On social media systems like YouTube and Facebook the volume of content being uploaded per second is too high for automated services to review and filter content unless the content is pre-labelled[1]. Hence there are two parts to the SafeCast system. First content has to be pre-labelled during upload in accordance with our metadata standard. Then it has to be automatically filtered by an App on the mobile device which is can read the SafeCast HeadCodes in the metadata and act upon them. The filtering process can be built into a social media application or it can be performed by the middleware in the operating system of the mobile device - it is entirely a matter of choice for social media companies and system developers. The SafeCast filtering App is thus extremely lightweight and simple to code because it only has to look-up the SafeCast HeadCode in the metadata of the video and filter it accordingly. Its implementation can be controlled by a parent when setting up their child's mobile device.

Safecast HeadCode Level	Child's Age	Equivalent TV Watershed time	Comments
0	No restrictions	No restrictions	Can be shown at anytime
1	6 and under	No restrictions but logged on device	Very young children should not see too much of this content - hence logging required in phones and tablets
2	Age 7 and over	7.30pm	Young children should not see too much of this content - hence logging required in phones and tablets. Also the restriction applies to advertising of high fat, high sugar products and services
3	Age 11 and over	9.00pm	Normal TV Watershed restrictions including on advertising of medicines, alcohol, gambling etc
4	Age 14 and over	10.00pm	Enhanced TV Watershed restriction used by UK schedulers
5	Age 18 and over	11.00pm	Highly enhanced TV Watershed restriction used by UK schedulers

[1] For example with YouTube its 2018 statistics show that 300 hours of video are uploaded to YouTube every minute! This is too high a volume to be managed without pre-labelling using filters. The complaint system is being gamed through inclusion of inappropriate complaints - e.g Justin Bieber videos are frequently red flagged as 'inappropriate' not for their content but because some YouTube viewers simply do not like Justin Bieber

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SafeCast and the UK Department of Health

We are currently preparing to respond to enquiries from the UK Department of Health on how we could implement SafeCast within ISO 26324. Please note that this section contains working hotlinks which explain our proposals in greater detail. It is also a 'work in progress'.

Adding SafeCast to the EIDR Registry will require it to be a field within the look up facility which is accessible via the EIDR User Interface

We are currently suggesting that the default SafeCast HeadCode to be included in all existing EIDR records is "*Unrated*". When coding an EIDR record so that it can be filtered against a SafeCast App the operator will be able to select the appropriate coding from a pull-down preset menu in the field definition. This we believe should be equivalent to the procedures used by YouTube in including the British Board of Film Classification (BBFC) codes. YouTube, in their developer's API allow the inclusion of BBFC ratings in the following format:

```
contentDetails.contentRating.bbfcRating    string
                                           The video's British Board of Film
                                           Classification (BBFC) rating.

                                           Valid values for this property are:
                                             ● bbfc12 - 12
                                             ● bbfc12a - 12A
                                             ● bbfc15 - 15
                                             ● bbfc18 - 18
                                             ● bbfcPg - PG
                                             ● bbfcR18 - R18
                                             ● bbfcU - U
                                             ● bbfcUnrated
```

Our current proposals (which need to be reviewed and signed off by the Chief Scientific Officer at EIDR) are that the SafeCast HeadCodes could be specified in the following syntax by EIDR:

```
contentDetails.contentRating.SCHCRating        string
                                               The SafeCast HeadCode rating.

                                               Valid values for this property are:
                                                 • SCHC0 — 0
                                                 • SCHC1 — 1
                                                 • SCHC2 — 2
                                                 • SCHC3 — 3
                                                 • SCHC4 — 4
                                                 • SCHC5 — 5
                                                 • SCHC6 — 6 (not for broadcast)
                                                 • SCHCUnrated
```

The new code SCHC6 is for content which is never to be broadcast but which can be circulated in controlled circumstances. For example, after the London bombings video evidence was taken on mobile phones of the dead and the dying. This material was used in inquests and was made available to news organisations. However, although there is a requirement for '*open justice*' the courts refused an application for the video evidence to be made available on the coroner's webfeed. We believe that this is the right approach and hence code SCHC6 would be reserved for this kind of application.

We anticipate that this coding system could be incorporated within Facebook and WhatsApp so that all video content would be pre-classified as it was uploaded to Facebook and WhatsApp.

Looking forward to hearing from you.

Yours sincerely

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Cc: ██████ at the Children's Commissioner