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April 20th, 2021

Mr. Lloyd Feldman
Cc/ Erik Boyko, CEO
VP of Legal - Stingray Digital
730 Wellington Street,
Montreal, Quebec, H3C 1T4, Canada.

Hi Lloyd,

Our team has evaluated recent evidence on UbiquiCAST and Stingray's media distribution systems. We concluded that Stingray Digital has misappropriated EGLA CORP's trade secrets and that Stingray is therefore infringing at least two of our US Patents 10,123,074 and 10,523,002¹.

We became aware of this recent UbiquiCAST's evidence just this month. As you recall, I evaluated your patent case against Music Choice and offered our intellectual property in good faith. Unfortunately, important legal documents and evidence your legal team filed in the E.D. of Texas was either sealed or heavily redacted, and we were unaware of our intellectual property being on Stingray's hands already.

However, the new identified evidence is not redacted and helped us identify how your system operates with a great level of detail, as it was chronologically organized.

In summary, we concluded that in 2014 when Stingray acquired DMX that our trade secrets went in possession of Stingray. Hence, UbiquiCAST now contains significant amounts of our intellectual property and trade secrets, and hence infringes our patents.

Clearly, trade secret misappropriation is a US Federal crime and we will forward all required documentation to the authorities showing in great level of detail, how "Stingray digital" executives mislead myself and my company in 2014 to gain access to our proprietary and confidential software and technologies.

In fact, around Q3'2013 and Q1'2014 Stingray Executives failed to disclose their conflict of interest with your company and proceeded to disguised themselves acting as MOOD Media employees. Fraudulently, presented EGLA CORP a term sheet that was never honored by MOOD Media and was only used to illegally take possession of our trade secrets and proprietary & confidential information which was believed to be bound under confidentially covenants.

¹ In December 22nd, 2014, Dr. Hernandez filed a provisional patent application around and obtained two issued patents in the United States (US Patent Numbers 10,123,074 and 10,523,004, a pending US Patent 16/152,606, and a pending European patent application No. EP3238457A1.

As a consequence, Stingray Digital without our consent, was able to gain access to confidential and proprietary information and misappropriated our trade secrets.

In fact, Stingray Digital took possession of our headend servers that contained confidential information, as well as hired at least two DMX executives² that were aware of our confidential information and trade secrets. Back then, we warned MOOD and Stingray that our Intellectual Property could be in danger of being stolen. Notwithstanding, MOOD Media and your Stingray Executives, at the time, misled us and said that our rights were being “duly protected.” Now, we know these statements were not true.

Today, we have solid evidence of this gross misappropriation, including details of your platform with numerous examples, and also how your customers are still using it.

Moreover, our investigation cross-referenced other cybersecurity websites, as well as publicly (readable) available information found in several dockets located in the Federal District Court in E.D. of Texas³

In the Federal Circuit case, your legal team sealed all details regarding “UbiquiCAST technology” and redacted many documents. Usually, this occurs when a corporation finds that disclosing that information will reveal their valuable trade secrets to the public. Therefore, Stingray team considered UbiquiCAST specifications and technical details as highly valuable, however it was nothing but a blatant copy of our innovation.

According to your own attorneys, UbiquiCAST OSE2 server was created by Stingray no later than March 2015 (“.. prior to March 2015, Stingray did not offer or provide any music video TV channels to MVPDs...”) as indicated in the redacted Dkt #203 filed June 4th, 2019 as part of 2:16-cv-00586-JRG-RS. Therefore, there was no OSE2 device during DMX acquisition, and now it explains how by March 2015, OSE2 was being offered to customers like AT&T.

On the other hand, our team used other methods of cross-referencing the unredacted evidence as the investigation was being conducted. The team identified several web links in log files that, included part of a web path, for example:

/song/L:2129124/showCoverORgenericCover/size_103_574.jpg that points to a specific album “cover” with a JPEG image.

A similar link to this path was found to be tracked by alienvault.com⁴:

https://otx.alienvault.com/indicator/url/http://covers.galaxie.ca/song/G:275221/001/showCoverORgenericCover/size_20_574.jpg.

² These two individuals were Gustavo Tonelli and Alejandro Cacciona, ex-MOOD/DMX executives hired by Stingray

³ Music Choice v. Stingray digital Patent Case in the ED. Of Texas, Judge Gilstrap, 2:16-cv-00586-JRG-RS

⁴ Alienvault is an AT&T Cybersecurity corporation.

Therefore, any web browser can be pointing to the web link and retrieve an album cover:

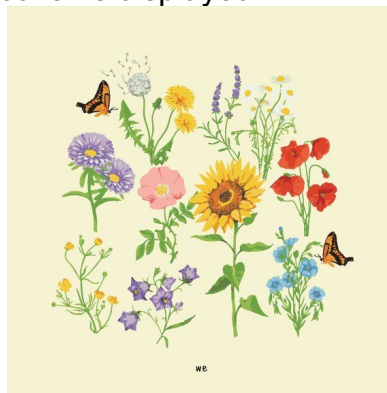
http://covers.galaxie.ca/song/G:275221/001/showCoverORgenericCover/size_20_574.jpg,

which as of April 19th, 2021 shows “Bob Seger’s” album cover:



Similarly, the same is true for the album cover retrieved during the Ex. Z41 that points to song **L:2129124** which would correspond to the link :

http://covers.galaxie.ca/song/L:2129124/showCoverORgenericCover/size_103_574.jpg , and the following album cover is displayed:



Hence, all those links found in the evidence actually point to galaxie.ca domains, and those assets are still available online as of April 19th, 2021.

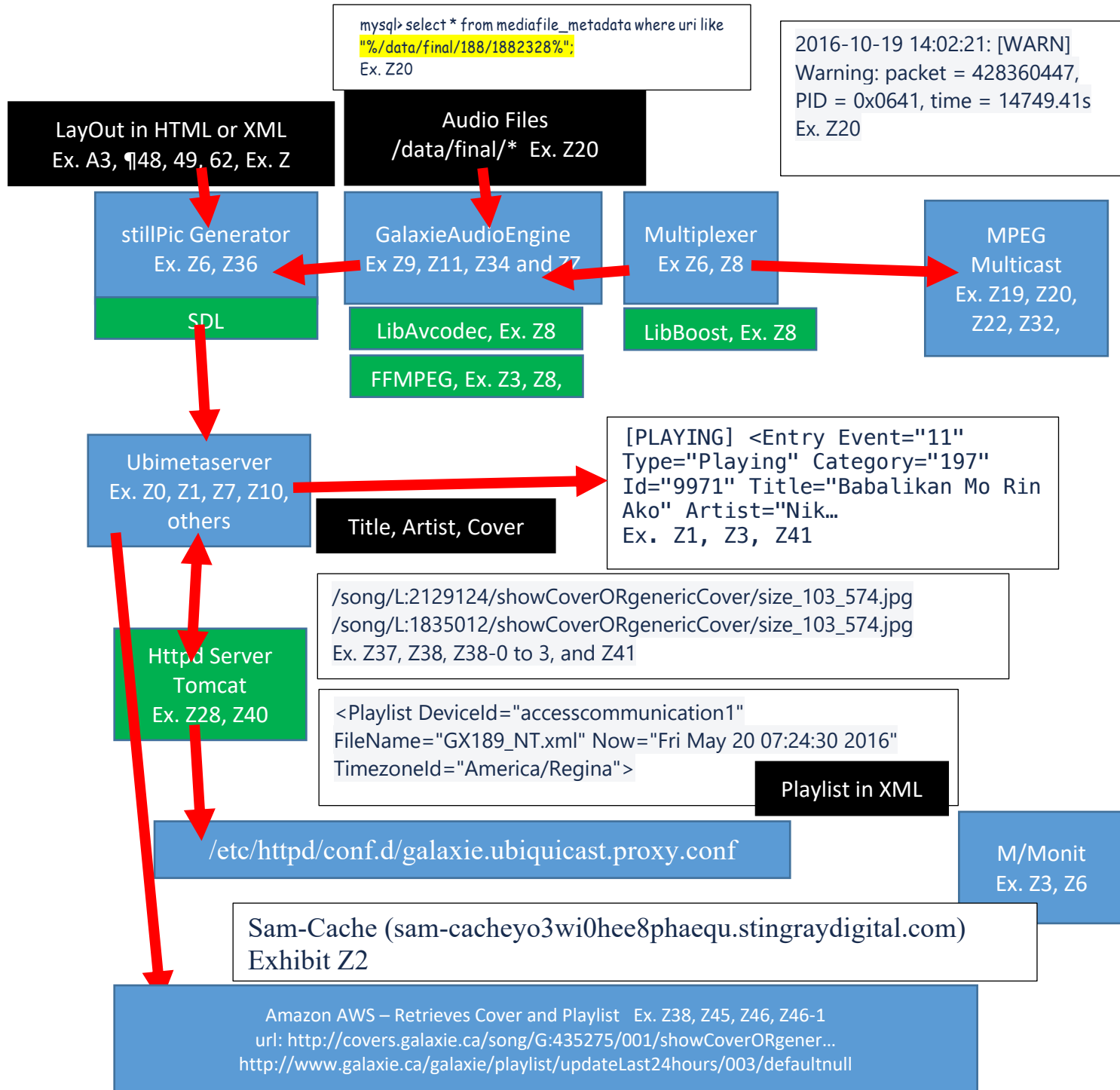
Additionally, the evaluated evidence contained proof of Stingray’s deployments in MVPDs around the world including: Axtel TV, Encompass, Cablevision, UNE, and many other locations where EGLA CORP had previously deployed its headend servers when EGLA CORP was working with DMX (aka MOOD MEDIA). Those servers were not returned and remain in possession of Stingray Digital as early as January 2014.

These facts validate and further confirm the authenticity of the evidence investigated.

In summary, the following diagram summarizes some of our findings on UbiquiCAST.

UbiquiCast – Technical Analysis from Evidence

Main components: “StillPic Generator”, ubiMetaServer, GalaxieAudioEngine, covers.galaxie.ca, and “Music channel” Creation



In summary, the UbiquiCAST diagram presented above is described as follows:

- a. **StillPic Generator.** This component creates the sequence of images that will be part of the video PID and are generated with the web links to images, e.g. size_104_504.jpg. The software also gets the information such as title, artist, information from the song and generates a video feed. This information can be found in Exhibits Z6 and Z36. This component can also be found on Dkt#292 and many others where Stingray Digital states that “*..The Audio Engine and StillPic Generator send data between them via a shared RAM...*” Therefore, the GalaxieAudioEngine receives sequence of still images multiplexes the audio located at /data/final/* as shown in Exhibit Z20. In essence, web components are used to assemble a generated video sent to the MVPD.
- b. **UbiMetaServer:** The StillPic Generator communicates with the ubimetaser, as shown in Exhibit Z1. The ubiquitous server updates Amazon’s queue with “title, artist” information that is currently playing including the next asset to play for a particular song. Additionally, the UbiMetaser handles the album covers as shown in Exhibit Z41, when an error makes reference to a local file
[/song/L:2129124/showCoverORgenericCover/size_103_574.jpg]
The cover was retrieved from server <http://covers.galaxie.ca/> as shown *supra*. An additional task that is seen from Exhibit Z0 is that ubimetaser is aware of an XML playlist, e.g. GX180_NT.xml or GXMC0176_NT.xml and others shown in the log. Therefore, playlists are in XML format and album covers are in JPG format downloaded from the web.
- c. **GalaxieAudioEngine:** Although, this component was labeled “Audio Engine” a in the E.D. of Texas documents. The Audio Engine multiplexes the audio files from /data/final/* storage, with the images, to generate a PID (Program ID) for audio and one for video. This component receives the information from StillPicGenerator as they are part of the same binary. The multiplexer logs can be found in Exhibit Z8. In here, GalaxieAudioEngine uses VideoTronTables, and then calls a method in a class **GalaxieAudioEngine::Multiplexer** which appears to perform standard functions of an audio, video, data multiplexer and Tables appears to address PMT or Program Management Table in an MPEG stream to be generated.
- d. **/data/final/*** : Appears that all music files are stored in this location and encoded depending on MVPD or Cable TV operator headend requirements. This can be demonstrated in Exhibit Z20, where a crash occurs for a missing multimedia file (using audio FLAC Format). A mysql database is used to search for all the files with a command such as “*select*

- * from mediafile_metadata where uri like "..."* as a return the query provides information of location of the file, format, asset_id, download_time. In Exhibit Z20 shows that PID=0x0641 was unable to continue streaming after this asset was not available to multiplex it. In this log /data/final/188/1882328 with asset id with value 1261691 was simply missing.
- e. **FFMPEG** : This is a standard open source package used in many Linux servers for encoding and transcoding video. However, using the proper combination of commands can only be achieved with trial and error, and sometimes may need specific updates to codecs and software. Exhibits Z3 and Z8, present what version of FFMPEG to use in UbiquiCast and the dependency with Libavcodec which, among other uses, can be used to encode a sequence of still images into a video.
 - f. **Web Server with Tomcat and Servlets**: UbiquiCast relies on a local Tomcat server and a remote servlet to serve, images and other metadata. The Tomcat Server serves the url or local weblink *"../ubiquicast/metadata?..."* for each music channel, as presented in Exhibit 28 and handles those requests for metadata. There are some server-side servlets using Grails running to serve : **covers.galaxie.ca**.
 - g. **M/Monit**: As shown in the many logs, GalaxieClient or other components may crash and M/Monit is the software that simply restarts the service, as presented in Exhibits Z3 and Z6.
 - h. **MPEG Multicast**: The evidence shows that in many cases PCR or Program Clock Reference, PID, and PMT are shared. As presented before an error in missing audio file would stop the generation of a sequence of MPEG streams, which is expected as MPEG multicast are continuous. In some errors, Audio PID is swapped with a Video PID that needs to be corrected (Ex. Z22). The evidence confirms that Audio and Video are part of an MPEG frame and is multicasted (Exhibits Z48, Z49, and Z50). In fact, UbiquiCAST appears to handle SPTS and MPTS, Single Program Transport Stream (Exhibit Z51) and Multi Program Transport Stream.
 - i. **Cloud interaction with AWS, SQS**: UbiquiCAST updates AmazonSQS and retrieves information from Amazon AWS, for example album cover pictures (Exhibit Z38-0 to Z38-2). And pushes status updates to AmazonSQS or queue.amazon.com. For example:
`https://queue.amazonaws.com
//008306160229/GalaxieMetadataPushQueue`
 - j. **Playlists**: Playlists can be XML or stored in a database. For XML in Exhibit Z51 `<Playlist DeviceId="maxtrax1" FileName="GX45_NT.xml"`

Now=".....">⁵as shown in Exhibit Z52 and Mysql database can also be used by Ubiquicast as shown in Exhibit Z20.

- k. **Sam-Cache:** Also located in the cloud, in a stingraydigital.com domain, is used to download playlists to the UbiquiCast server as shown in Exhibit Z2
- l. **Exhibit Z53** further confirms that UbiquiCAST, GCT, and UbiMetaServer are separate entities.
- m. **SDL:** A known package called Simple DirectMedia Layer appears to be used to generate enhanced video effects to use OpenGL and other effects for the screen being generated. (Exhibit Z13)
- n. **Fortigate:** Use of VPN, in some cases NAT to connect Caching and Backup to Stingray's backend infrastructure. (Exhibit Z49, Z53 and Z54)
- o. **Servers:** Some are Dell Servers (could be 3 as shown in Z59). Usually called Primary Server and Backup (2 servers from Ex. Z58). The serves provide functions of Caching Proxy (ubimetaserver) and stillPicGenerator (Exhibit Z55). The servers can generate video (as shown in Exhibit Z57).
- p. **Linux-based:** All ubiquicast servers appear to use different versions of CentOS, for example Ex. Z59 reveals CentOS 7

Furthermore, the list of some of operators identified that are using or have been using UbiquiCAST in the evaluated evidence include:

CCSA Operators (Ex. Z61)	Other Operators (Karaoke) Ex. Z62	Ambience Channel (Ex Z63)	Other Carriers (ExZ66)
WTC Communication NCTC Communication Execulink Wightman Seaside Communication Nexicom Mitchell Seafort	Telus Sasktel Novus MTS Hawaiian Tel Du Bell Aliant AT&T 4K Clients (Ex Z67)	D-Smart (Turkey) Vodafone (Portugal) Wind Hellas (Greece) Totalplay (Mexico) Entel (Peru) Sky (Mexico)	<i>North America:</i> Access Communication Bell Aliant Bruce Telecom CityWest Cogeco Eastlink Execulink Hurontel Maskatel MTS NorthwesTel
		Top Operators (Ex. Z64)	

⁵ https://en.wikipedia.org/wiki/Max_Trax

<p>Tuckersmith Mornington Hay Communication Cable Tv Slave lake Cable TV of Camrose Bruce Telecom Brooke Telecom Hurontel</p>	<p>- Rogers -Videotron -Telus -Get -Elvis -Demo2 -Voo -Orange -VodafoneSP</p> <p>Additionally: TIGO from Guatemala, El Salvador, Honduras, Bolivia, Operators in Colombia, Cable Onda, and many others.</p>	<p>Rogers 1st (!) Telus (!) Bell (!) Shaw (!) Videotron (!) Cogeco (!) Sakstel (!)</p>	<p>Novus Telus Rogers H264 Source Cable Videotron Wightman Westman</p> <p><i>LATAM</i></p> <p>-Skymexico -Skymexico Rio De La Loza -Telefonica Peru</p> <p><i>EUROPE</i></p> <p>Telenet Dsmart Hilversum Canalsat M7 Telekom Austria- Globecast RRmedia Hilversum</p>
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Consequently, through expedited discovery and vigorous cross-examination, we will be able to prepare and identify more evidence required for trial.

We are also aware of the accusations made by Music Choice about Stingray Digital gaining access to their proprietary information during an acquisition process mentioned in their complaint. In fact, Greenberg and Traurig attorneys withdrew from your patent case, and your new attorneys complained about \$US 9M bills from GT. In the meantime, Stingray appeared to walk away from an agreed settlement with Music Choice. Finally, this settlement and legal fees put a dent on Stingray's balance sheet of over \$US 21M.

Furthermore, It will be shown in court that EGLA CORP's was misled and falsely made believe that MOOD MEDIA and EGLA CORP were under new contract and an NDA. Now, we can conclude that it was just a ploy to allow Stingray transaction with MOOD Media to close while providing free access to our trade secrets and proprietary information under a false pretense.

Moreover, Stingray financial statements and annual reports showcase great success and substantial growth from 2014 to 2021. We estimate total revenues over US\$700M and over US\$ 430M only in Music Programming income from 2014 to 2021.



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US law permits a payment of a royalty to plaintiffs of trade secret misappropriation, calculations of damages based on unjust enrichment, loss profits, and other additional causes.

EGLA Proposes a settlement and a business negotiation:

- A 12% royalty is fair and acceptable to EGLA CORP that can be applied to the Music Programming line item of your income statement,
- We consider a one-time payment of **US\$51.6M** to be a fair share to settle this matter.

I am attaching a settlement term sheet for your review. As you will be aware, case law is not going to be favorable to your company and individuals, as trade secret misappropriations, may also face criminal charges. Hence, your current exposure is far greater than this amount.

EGLA CORP Management and I are willing to give an opportunity to your company until April 30th, 2021 at 5pm to consider this settlement proposal, and an amicable solution that will include a payment to EGLA CORP that's equitable to our loss and avoid costly litigation expenses.

Otherwise, we will let our legal team take over and file all the identified evidence appropriately with US Federal authorities, ITC, and any legal means in our power to protect our interest.

Best Regards,

Dr Edwin A Hernandez, Inventor
Chief Technology Officer
EGLA CORP dba EGLA COMMUNICAITONS
edwinhm@eglacorp.com | 561.306.4996

Dr. Alcides Hernandez, CEO
Chief Executive Officer



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SETTLEMENT AGREEMENT- Trade Secret, Patent & Technology Licensing Expires: May 1st, 2021

Licensor	EDWIN HERNANDEZ, LLC and EGLA CORP
Licensee	STINGRAY DIGITAL GROUP, INC – Canadian Company or designated US Representative (STRINGRAY MUSIC, USA), or _____
Intellectual Property Licensed	<ul style="list-style-type: none"> • US Patent 10,123,074, and 10,524,002 and all continuation patents • PCT 16/152,606 • European Patent: EP3238457 • Software Licensing to images and sources of the EGLA MEDIA PLUG servers and reference Implementation. • License to all trade secrets
Payment	US\$ 51,600,000
Additional Agreement	Mutual release will be created for both companies and affiliates
Exclusivity	Non-Exclusive Licensing Agreement for Patents and Software.
Enforcement Rights	No enforcement rights to licensee
Schedule	<p>Payment Schedule, the “Payment” amount is made to <u>25,000,000</u> upon signature of this agreement,</p> <ul style="list-style-type: none"> • Non-exclusive License to all patents from Dr. EDWIN HERNANDEZ will be issued. <p>and <u>26,6000,00</u> upon signature of mutual release and transfer of github contents to Licensee.</p> <ul style="list-style-type: none"> • Mutual release and license to all trade secrets • Access to a github with sources of servers with software and code and documentation available.
COUNSEL	A designated attorney firm will be engaged by EDWIN HERNANDEZ, LLC & EGLA CORP to finalize all docs.
PRESS RELEASE	Announcement and press release issued by Stingray Digital, Inc about licensing agreement with EGLA CORP and EDWIN HERNANDEZ, LLC, made in the most favorable way to both parties.

Dr. Edwin A. Hernandez
CTO EGLA CORP

Dr. Alcides Hernandez
CEO – EGLA CORP

Erik Boyko
Stingray Digital
CEO