UNITED STATES
INTERNATIONAL TRADE COMMISSION

In the Matter of:	)	Investigation No.
CERTAIN SMART WEARABLE DEVICES, SYSTEMS, AND COMPONENTS THEREOF	)	337-TA-1398

OPEN/CLOSED SESSIONS

Pages: 1 through 287

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having been first duly sworn/affirmed, was examined and testified as follows:

THE WITNESS: Yes.

JUDGE JOHNSON HINES: Thank you very much. Please be seated and welcome.

THE WITNESS: Thank you.

DIRECT EXAMINATION

BY MS. CARLAN:

Q. Could you please state your name.

A. It's Michael Anthony Ishobashi Chapp.

Q. And who is your employer?

A. It's Oura Ring, Inc.

Q. Do you have any relationship with Oura Health Oy?

A. I do, yes.

Q. And what is that relationship?

A. I am a representative of Oura Health Oy.

Q. How long have you been employed by Oura Ring?

A. It has been a little over five and a half years.

Q. And what's your current position?

A. I am the chief operating officer.

Q. And what are your responsibilities as COO?

A. So I'm responsible for our product delivery organization, and that includes our product team, our industrial design team, our science, hardware, software, and

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then we also have what we call a business operations team, which includes our member experience, and then IT organization.

Q. And what other positions have you held at Oura, if any?

A. I've also been the interim CEO.

Q. What are -- what were your responsibilities as interim CEO?

A. So everything that I just mentioned, and I also had our people team, our finance organization, marketing, and B2B organization as well.

Q. And where is your office?

A. San Francisco, California.

Q. And can you tell me where the CEO, the chief commercial officer, the chief legal officer, the chief supply officer, and the chief marketing officer of Oura sit?

A. All within the United States.

Q. So prior to joining Oura, what were some of the other jobs you held?

A. So I have held numerous roles, from engineering in the technical side all the way through executive and leadership roles, from large corporations all the way through my own personal startups.

Q. And so then do you have engineering degrees?

A. I do, yes.

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Q. And do you have other degrees besides engineering degrees?

A. I do. I have an MBA as well.

Q. Okay. Thinking about your career, is there any kind of mission that you personally have in your career?

A. Yeah. It's actually -- so I grew up in Michigan, the auto -- the home of the auto industry. And when I was a young kid, I saw the -- kind of the contraction of the industry, the challenges that were being faced, and the impact that that was having on our community. So it was whether it was a growth year or kind of a contraction year, we would see people in our community either gain or lose their jobs. And it ws similar to this time of the year where if it was a bad year, if you were lucky enough to get a gift, it would be like socks or T-shirts.

And I remember looking at my dad and just saying, you know, one day I want to create jobs in the U.S. And I hoped that I've kind of accomplished that either through the engineering and the products that I've created in the world or through, you know, starting my own companies or leading companies.

Q. So what brought you to Oura?

A. So, similarly, I -- I was just -- at that point in my life, I was -- I had a parallel path. I was running two companies that I had started, and I had severe burnout.

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And I had just also gotten married and my wife was like, look, you need to take some time off for yourself and -- and really recover.

And so I -- a friend had introduced, reintroduced, me to Oura, which was their second-generation ring, and I put it on and it was something magical. It was the first time that I had ever worn a wearable that actually gave me insights and that actually changed the behaviors of myself. And I knew that there was something special there that I needed to be a part of.

Q. So let's talk about Oura specifically.

There are two Oura entities; is that right?

A. That is correct, yeah.

Q. So I'm going to ask about some dates. And did you create a timeline?

A. I did, yes.

Q. And this is CDX-2.2. Could you tell me when Oura Health Oy was founded?

A. So Oura Health Oy was founded in 2013, but I think it's important to note that it actually was founded -- the original founding name was JouZen, and that was in 2023.

Q. Okay. And we can take that down.

How was Oura Inc. related to Oura Health Oy?

A. Oura Ring Inc. is a subsidiary of Oura Health Oy.

Q. So we talked earlier about your mission, but

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could you describe Oura's mission?

A. Yeah. So we exist to empower everyone to practice health on a daily basis. What we're striving to do is change the world from reactive care, meaning when people get sick, to proactive care, to learning about themselves and making daily habits, positive daily habits, with the intent that you don't ever have to have that reactive care one day. So that's what we're about.

Q. And what is Oura's origin story? How -- and then how did Oura land on a ring?

A. So Oura actually was born out of a small town in Finland called Oulu. And it's a quite remarkable experience if you get there because there's only 1900 hours a year of daylight. So the majority of the time is spent in darkness. And health there, because of that, has become so important and ingrained into their culture. So if you can imagine mental health and physical health become really important for them.

And our founders were looking at seeing the trends of chronic diseases increasing, whether it's diabetes, heart disease, dementia, Alzheimer's, like all of that is increasing in the world, and they were really looking at, well, again going back to our mission, how do we start to prevent this. And there was correlations during the time period around rooted in sleep, so sleep

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deprivation.

And so the founders really were like: How do we get the best type of signals off of -- physiological signals to really help people learn about the importance of sleep? And through all of their research, all of the trials and tribulations of coming up with this product, they found that the ring form factor was the best place for them to be able to do that.

Q. And what product does Oura sell right now in order to achieve its mission?

A. So we sell what I'd say is a complete solution. So I mentioned it starts off with the ring. And that's where we -- I almost look at it as magic. There's this beautiful ability for us to be able to pull signals and extract these physiological signals through the ring.

And then we take that data and we process it through our algorithms. And then all of that information, the insights and any guidance that we provide, is all displayed through our app to our members.

Q. Okay. I've placed two rings on the document projector here. And if you could take a look at those. They are CPX-7 and CPX-12.

And can you tell me if these are Oura rings?

A. Yes, they are.

Q. Okay. Thank you.

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Do Oura's Finnish roots that you were describing have any influence today on the Oura ring?

A. Absolutely. I mean, going back to what I had mentioned, there's this eloquence of what they've been able to do in two -- be able -- in two ways. One is, I think, Finnish design itself is how do you take something that looks really complex and make it look really simple, which is an amazing feat in itself and I think most people would compare it to Scandinavian design, if you will.

And then there's this element of being able to create balance in your life. And what we kind of capture in that is the essence of how we communicate with our members through the app. It's all -- to me, it's pretty magical and it's special about how the culture is actually brought through into our product.

Q. So how does Oura market any of these Finnish roots?

A. So just recently we started doing a -- really a campaign that is a nod to, an homage to our heritage. Everything I just mentioned, it's a pretty special thing to, if you go to Finland, there is these amazing cultural elements, like you take your shoes off when you walk in the door at the office and, you know, we -- people wear their rings in saunas, for example. We -- we do tests around these things, right?

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And so what we wanted to do was bring to the world and pay homage to our heritage and share that with the world. So we have marketed it, but there's another element to it, which is we also share that internally. We have scaled and we have grown quite rapidly in the United States.

And, in fact, like, we want people to understand what it's like, what that culture is, and to experience it and make sure that they encapsulate that and like, go, with building that into our products in the future. And so we actually send our team members over to Finland to experience it, to work there, to learn, to see the origin of it.

So it's really about how do we celebrate that history and make sure that, as we scale and grow, we're really carrying that on through all of Oura.

Q. But was the current version of the Oura Ring developed only in Finland?

A. No.

Q. How many generations of the Oura Ring has the company offered?

A. We've offered four.

Q. Okay. And we'll take a look at your timeline to remind of dates, but could you tell us when the first-generation Oura Ring was sold?

A. The first one was sold in 2015.

Q. And did that first Oura Ring have an app?

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A. It did, yes.
Q. Okay. And you can turn in your binder or we could pull up CX-0834 at page 2. And could you tell us what this picture is?
A. That is our Gen. 1 ring.
Q. Okay. How were the sales of Gen. 1?
A. At the time, I think we -- I think they were pretty good. It was roughly between 10- to 13,000.
Q. And 10- to 13,000 units or --
A. 10- to 13,000 rings, yes.
Q. Okay. Okay. Now, looking back at your timeline, when was Gen. 2 first sold?
A. So that one we launched in 2018.
Q. All right. Let's pull up CX-1007, and this photo there depicts two rings. Could you identify both of these?
A. So the black one that you see there, which we kind of highlight as our class ring or the Superbowl ring, if you will, that one is our Gen. 1. And then the more refined ring that you see there in silver is our Gen. 2.
Q. And how would you just briefly describe the main difference between the two?
A. I mean, looking at them, drastically different. I think our engineering team did an amazing job being able to miniaturize everything that you see in the Gen. 1 and put it in an elegant, you know, ring for Gen. 2, making it look

Patent Owner Oura Ex. 2024, 0010

more like an everyday ring, if you will.

Q. And then if we look at your timeline, there was a Gen. 3?

A. Yes, there was.

Q. And when was that first sold?

A. That one was sold in October of 2021.

Q. Let's take a look at CX-091. Can you tell us what that depicts?

A. That is the Gen. 3 ring.

Q. And just at a very high level, was there any change from Gen. 2 to Gen. 3?

A. There was. We added additional sensing capabilities.

Q. And was there a Gen. 4, finally?

A. Yes, there was.

Q. Let's look at the timeline to just get that date, although you probably know this off the top of your head. When did Gen. 4 release?

A. We just recently launched that in October of 2024.

Q. All right. And let's pull up CX-1146. And could you identify this, please.

A. That is the beautiful Gen. 4 ring.

Q. Okay. And I'd like to have them all stacked together on the screen, if possible, all these generations.

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Thank you.

And just looking at this, how would you describe the Gen. 4?

A. So we -- it's an evolution from one generation to the next. And we look at, like, the additions that we're adding, so how do we increase the capability as time goes on.

And with Gen. 4, you'll see an innovation there and our evolution of us getting to a ring which really looks like an everyday ring, all titanium.

Q. So is Oura still selling any Gen. 2 rings?

A. No, we are not.

Q. Is Oura still selling Gen. 3 rings?

A. We are. So we'll sell through all of the inventory that we have currently, and then as soon as we sell through all of that inventory, then we'll stop selling Gen. 3.

Q. Okay. So you still have a little bit of that in inventory right now?

A. Yes.

Q. Okay. We can take that down.

Tell me, why does the Oura Ring product also have an app associated with it?

A. Well, if you just saw, none of the rings actually have a display on them. And so in order for us to

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communicate and share the insights and all of the maybe recommendations, we do that all through the app. And so it's really needed in order to be able to share back everything with our members.

Q. So is the -- so is the app essential or necessary as part of the ring offerings?

A. It absolutely is, yes.

Q. What kinds of things do you see through the app?

A. So we will share things like the -- you'll have the activity score. You'll have the sleep score, readiness score. We also have additional insights for women's health, and then we have additional elements like sleep -- sorry, stress and resilience, and then we also have heart health as part of our offering.

And so all of that, including some breathing exercises and meditations, is part of the app. That's all a part of it.

Q. So at a very high level, can you explain how the product gathers data from the person who's wearing the ring?

A. Yeah. So at the highest level, all of the LEDs that we've talked through, the green, the red, the IR, it shines light into the finger, and then we have photo detectors that will receive the signal back. And then from there we will take those physiological signals, we'll use our algorithms, and then from there we'll develop a feature

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around it from those physiological signals that come off of it.

Q. Does Oura charge a subscription?

A. It does, yes.

Q. And how much does that subscription or membership cost?

A. It's $5.99 per month.

Q. When did Oura begin offering a membership with subscription?

A. That started with the launch of Gen. 3.

Q. Now, if a customer decides they don't want to pay for a membership, can he or she still use the Oura Ring?

A. Yes, they can.

Q. And what features are available through the app if you're not paying for the subscription?

A. So you'll have access to the three scores, so activity, sleep, readiness. You'll also have access to some of the content that I mentioned, like meditation and breathing exercises. And then we also offer online the ability for our members -- or members to be able to download that data directly.

Q. Okay.

MS. CARLAN: And, Your Honor, I have some questions now that need to go on the confidential record, please.

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JUDGE JOHNSON HINES: All right. We'll go on the Oura confidential record.

(Whereupon, the hearing proceeded in confidential session.)

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O P E N S E S S I O N

BY MS. CARLAN:

Q. So back on the public record.

Tell us what is Oura's view of competition in the marketplace?

A. We see it as healthy. We see it as good. Kind of look at it as like during the Olympics, right, you have all the racers out there and each one is pushing each other to be better. And, you know, I think it's healthy.

Q. Does Oura track any categories of competitors?

A. We do, yes.

Q. So what are some of the categories of competitors that Oura tracks?

A. So we'll track activity trackers, we'll track wrist wearables and then the obvious rings.

Q. Okay. And could you name some of the competitors in the ring form factor?

A. So there is the EV ring. There will be a RingConn and Ultrahuman.

Q. And there are others?

A. Other rings or --

Q. Yes.

A. There's a lot of rings out there now, yeah.

Q. Could you name some -- just a few of the non-Smart Ring wearables that you track as competitors?

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A. For wrist wearables, we'll track the Apple Watch. We'll track Whoop, Garmin, Polar.

Q. And thinking about all these competitive products, do they have anything in common?

A. All of them do wellness sensing.

Q. So does Oura consider Ultrahuman and RingConn to be direct competitors?

A. Yes.

Q. And are RingConn and Ultrahuman sold in any of the same channels as Oura?

A. Yes, they are.

Q. Which -- which channels, or could you name some of them?

A. The most obvious, I think, is probably the direct to consumer, so from website, and then Amazon.com would be another.

Q. And what is the current sales price of the new RingConn ring, Gen. 2?

A. Last time I checked, it was 299, $299.

Q. Understood. All right. Let's talk about importation. In preparation for this investigation, did Oura buy some Ultrahuman and RingConn rings?

A. Yes, it did.

Q. Okay. I'd like to show CX-1013. And if you could identify this document, please.

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A. That is the invoice for the RingConn ring.
Q. And if we show CX-0694, and this is page 9, could you tell me what this is?
A. That is on the box of the RingConn ring.
Q. And where does it say that the RingConn product is made?
A. In the bottom left, it shows it's made in China.
Q. All right. And now I'd like to show CX-1008. Can you tell me what this document is?
A. This is the Ultrahuman invoice.
Q. And if you look at CX-1009, can you tell me what this document is?
A. That is the DHL shipping registry for the Ultrahuman ring.
Q. And where did Ultrahuman ship the ring from?
A. Bangalore, India.
Q. Okay.
MS. CARLAN: And now I'd like to go back to the confidential record, please.
JUDGE JOHNSON HINES: All right.
(Whereupon, the hearing proceeded in confidential session.)

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O P E N S E S S I O N

JUDGE JOHNSON HINES: Do you have another copy? It's fine. It's fine. We're good. No, no, it's fine. We're good. We're fine.

Good afternoon. Could you raise your right hand, please.

Whereupon--

CURTIS von BADINSKI,

having been first duly sworn/affirmed, was examined and testified as follows:

THE WITNESS: I do.

JUDGE JOHNSON HINES: Thank you very much. Have a seat. Welcome.

THE WITNESS: Thank you.

DIRECT EXAMINATION

BY MR. VIDWAN:

Q. Good afternoon, Mr. von Badinski. Can you please state your name for the record, please?

A. Yeah. Curt von Badinski.

Q. And where do you currently work?

A. I'm currently self-employed. I have a consultancy called Mechio.

Q. And what is your educational background?

A. I have a Bachelor of Science in mechanical engineering, with a concentration in microtronics.

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Q. And when did you receive that degree?

A. 2003.

Q. And can you tell us a little bit about your work background?

A. Yeah. I have been practicing mechanical engineering for a while. I worked at Cisco Systems as a mechanical engineer. After Cisco, I worked at Lockheed Martin, working on satellites and propulsion systems, things of the sort.

After Lockheed, I went to a product design company making consumer electronics devices. After Speck, I started my own company called View Factor, where we made camera accessories for the movie industry. That's like metal plates that go on cameras and remote control systems.

After that -- or actually during that, I started Mechio, not the same Mechio as now, old Mechio. That eventually became Motiv. And that was a smart ring company. And after Motiv was acquired, I was briefly consulting with Proxy, who we sold the company to.

After that, I worked at Facebook Connectivity, working on satellite communications systems and terrestrial communications systems. My group was acquired. I went to Amazon. I worked there on the same. And after Amazon, I went back into consulting again, can't get enough consulting, and then worked at a company called Anduril

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doing defense contracting. And then more recently, I went back into consulting again.

Q. And you mentioned Mechio that was acquired by Motiv. How did Mechio Motiv come about to be?

A. So Mechio started as an idea around -- well, technically, the first idea I had was making a little modular development system for electronics kind of like Arduinos. I'm not sure if anybody is familiar with that.

My friend and I started working on that for a while, and we were going to release it to the public and then we found it on Kickstarter, so we decided it probably wasn't worth going after something someone else already did.

But the idea after that was the smart ring, basically a keepsake where you flick the ring, and then as the ring rotates around, it shows a little message on it like I love you or your wedding date, things of that sort.

Q. And when did -- would it be okay if I refer to Mechio and Motiv as together? I understand that Mechio's name was changed to Motiv.

A. Yeah. That's fine.

Q. When was Motiv officially formed as a company?

A. End of December 2013.

Q. And how many founders were there of Motiv?

A. There were four of us. I started the company. I brought Peter Twiss onboard and then followed up with Mike

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and Eric Strasser.

Q. And you say you started the company. How did you fund the company?

A. I self-funded it. I sold my truck, walked to work for about six months, and then I cashed out my 401(k), took out a loan. You know, things startup people do.

Q. And to your knowledge, did any of the other founders invest any of their own money?

A. Not -- not at that point. I think there were ancillary things here or there that they would spend, you know, like on flights or miscellaneous stuff, but I didn't -- I don't recall any massive influx of capital from them.

Q. And you had mentioned that your original idea you had was to kind of have a keepsake ring. What -- about what time frame was that, that you came up with that idea?

A. It was about a year before I started talking to Peter about it, so probably around 2012 or earlier.

Q. And when you mentioned Peter, are you referring to Peter Twiss?

A. Yeah.

Q. How did you know Peter Twiss?

A. I had Peter as a contractor at View Factor working on some projects that I had. Probably got a couple projects with him, and then I enjoyed working with him, so we started working on things on the side. So that was that

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original dev system that I was telling you about, the stackable electronic thing. And then when that hit a dead end with the Kickstarter thing that I saw, I decided that the next thing we should work on would be that ring, and that's when I presented that to him.

Q. So you were working on something with Peter and you saw it on Kickstarter so you changed direction. Is that fair?

A. That's fair, yeah.

Q. Okay. So going back to Motiv, did you look, when you started working on wearable rings, whether or not there were any other smart rings out there in the market or what kind of research did you do?

A. Yeah, I did. I think most of it was just looking around Google trying to find anything that was representative. I did some brief searches on Google Patents looking for anything that was really obvious that read on what we were doing.

Q. You mentioned patents. Why did you look at patents?

A. Just making sure I wasn't infringing on anything. You know, there's no point to working several years on something and then just finding out that you're infringing on something. So I knew enough about patents not to do that.

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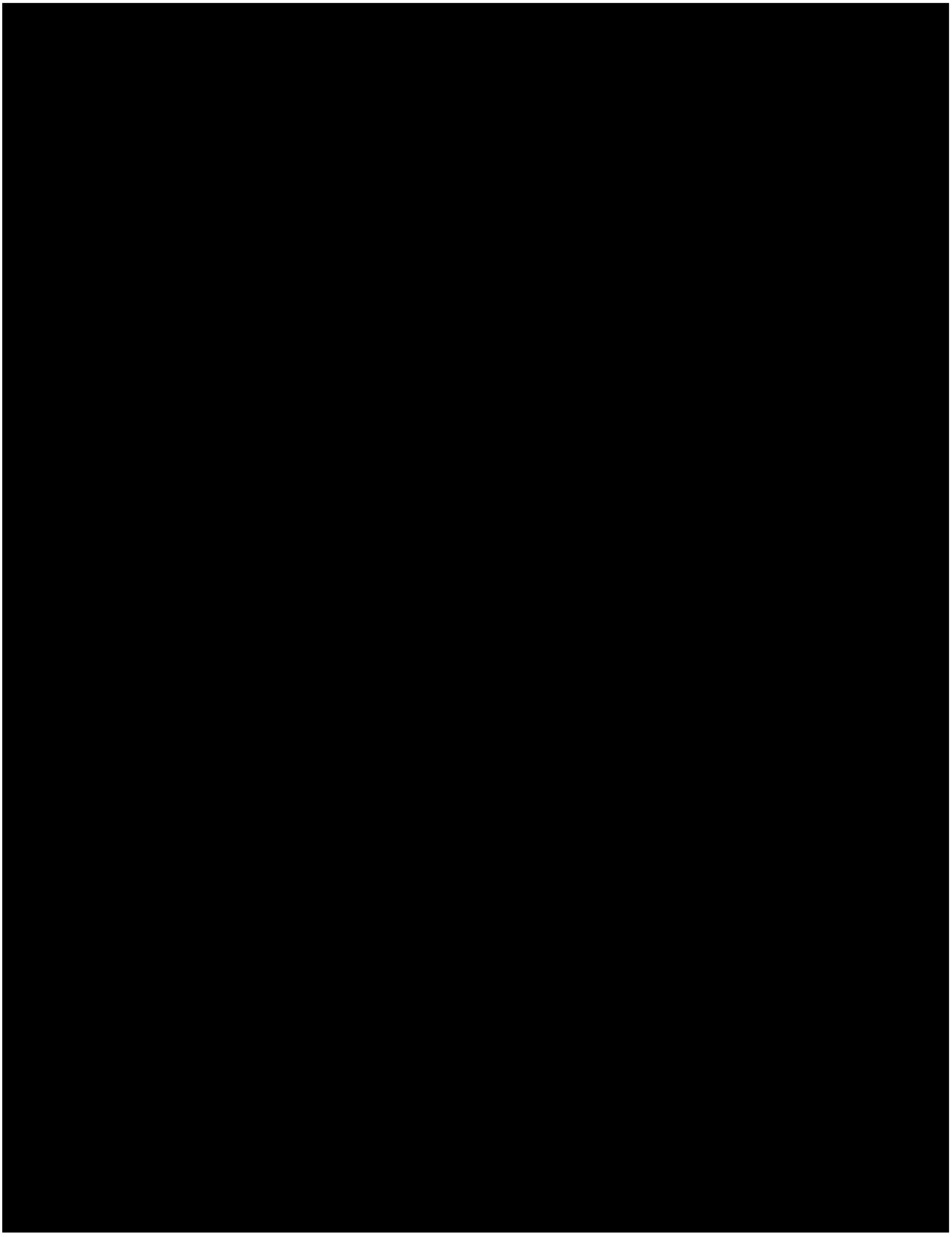
Q. Let's take a look at your inventor notes.

MR. VIDWAN: But, Your Honor, for this portion, I would like to go -- we would like to go on confidential record.

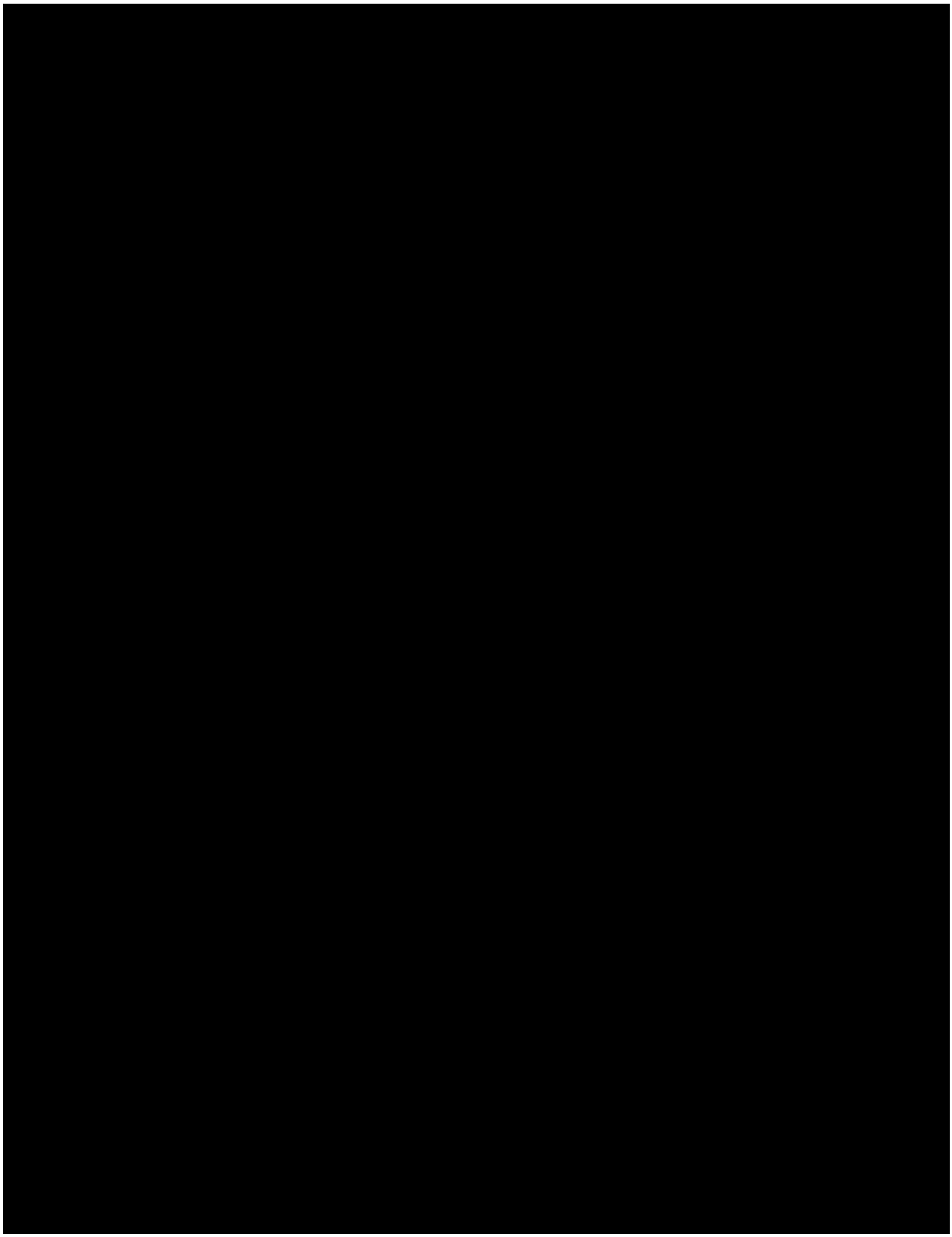
JUDGE JOHNSON HINES: All right.

(Whereupon, the hearing proceeded in confidential session.)

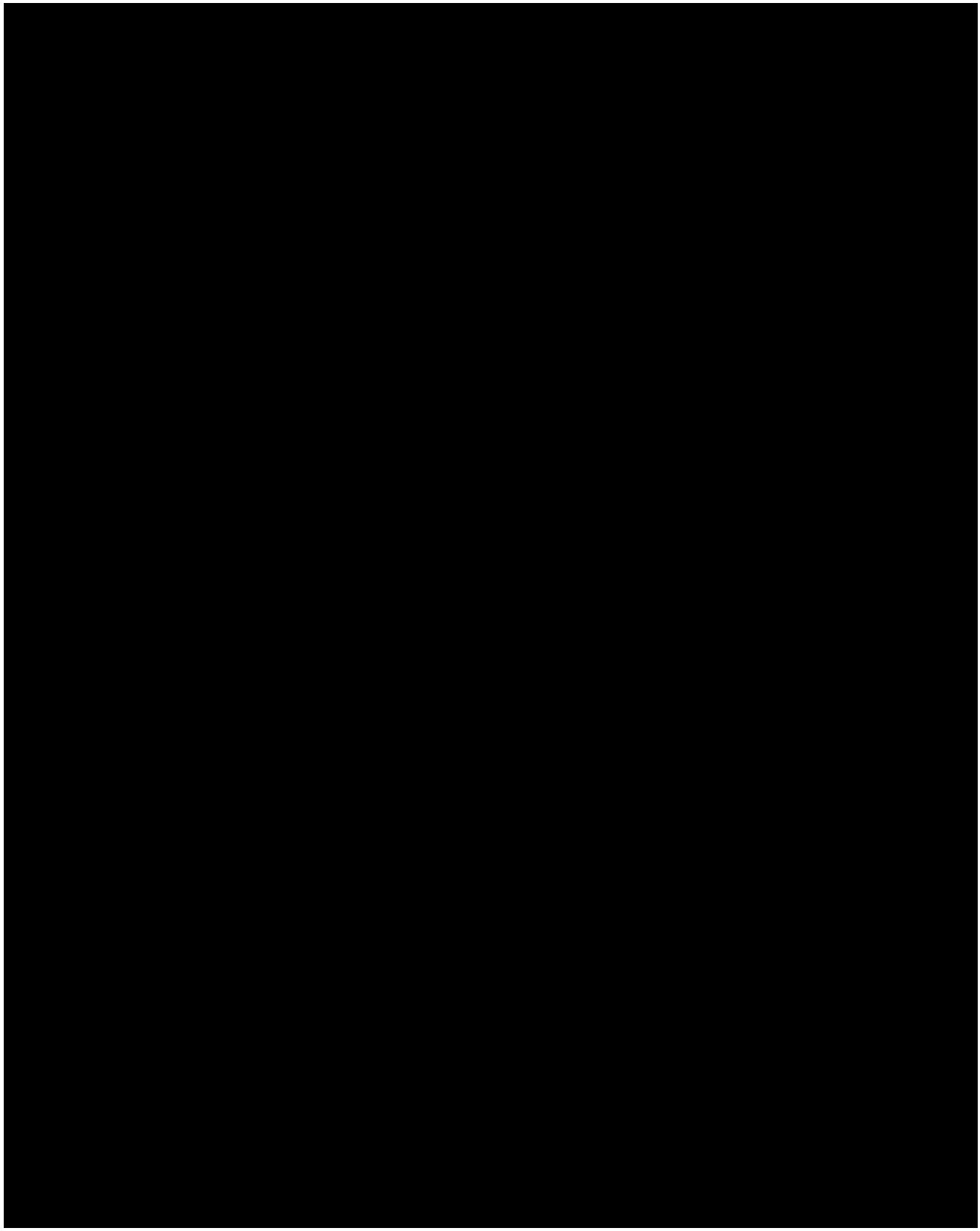
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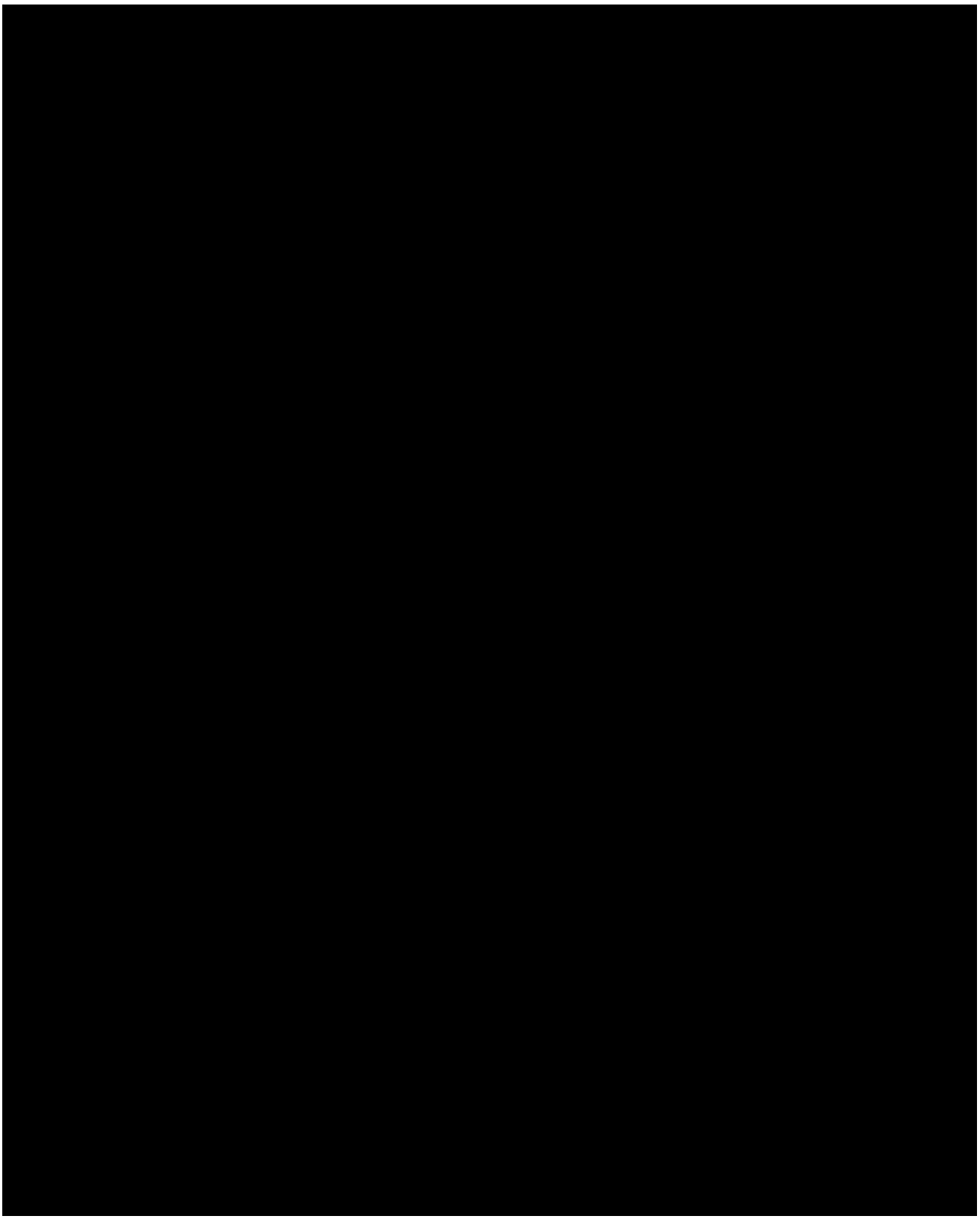
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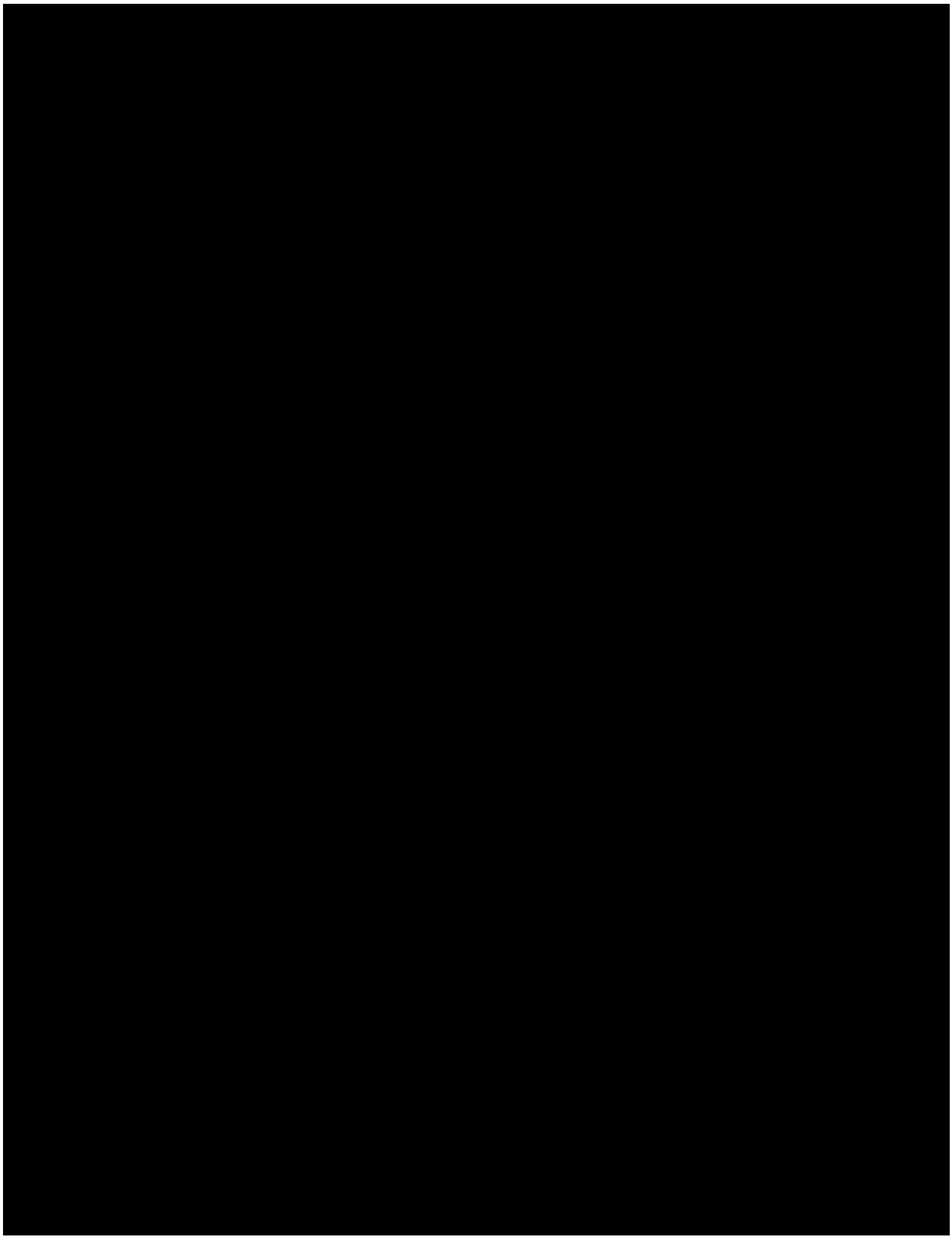
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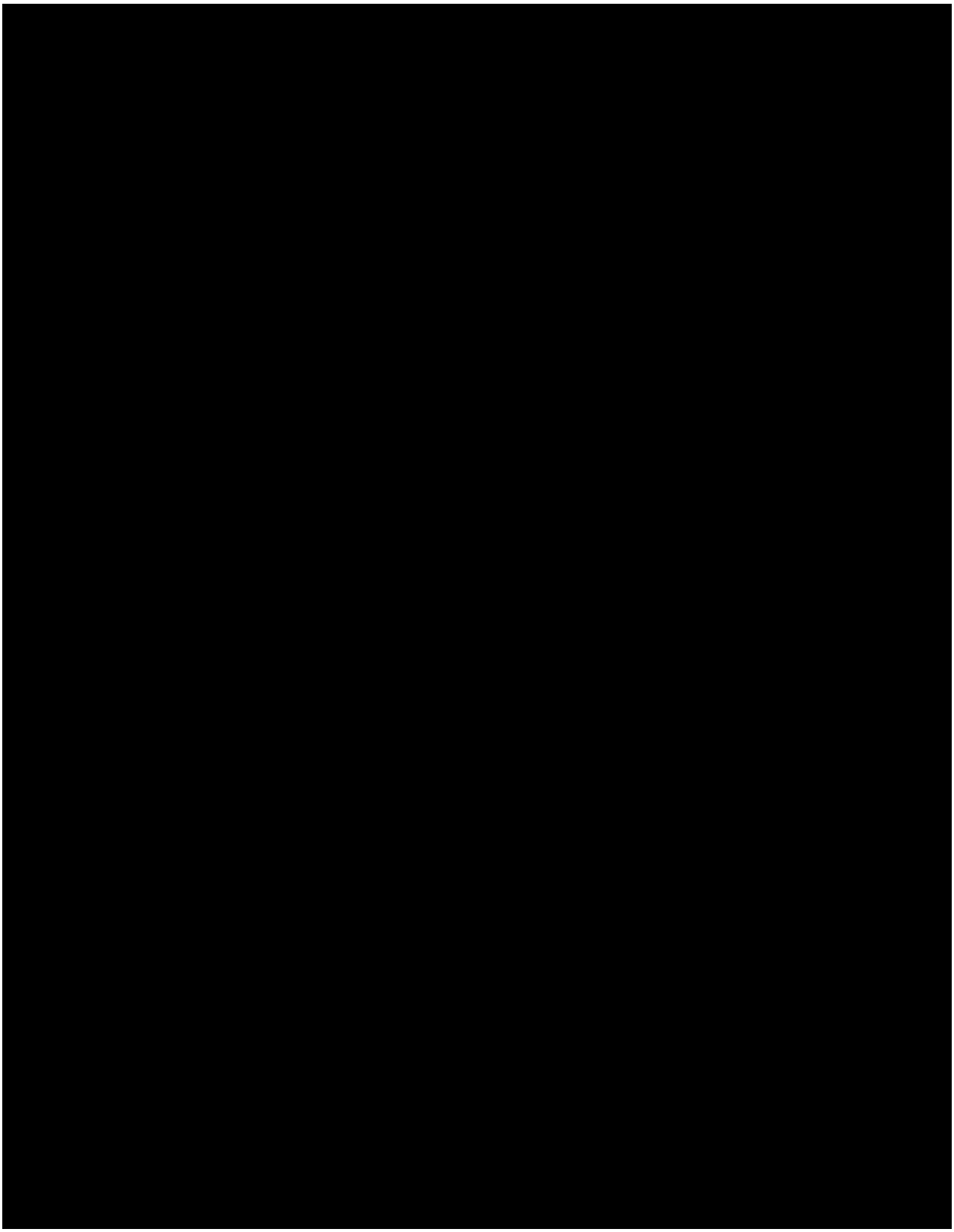
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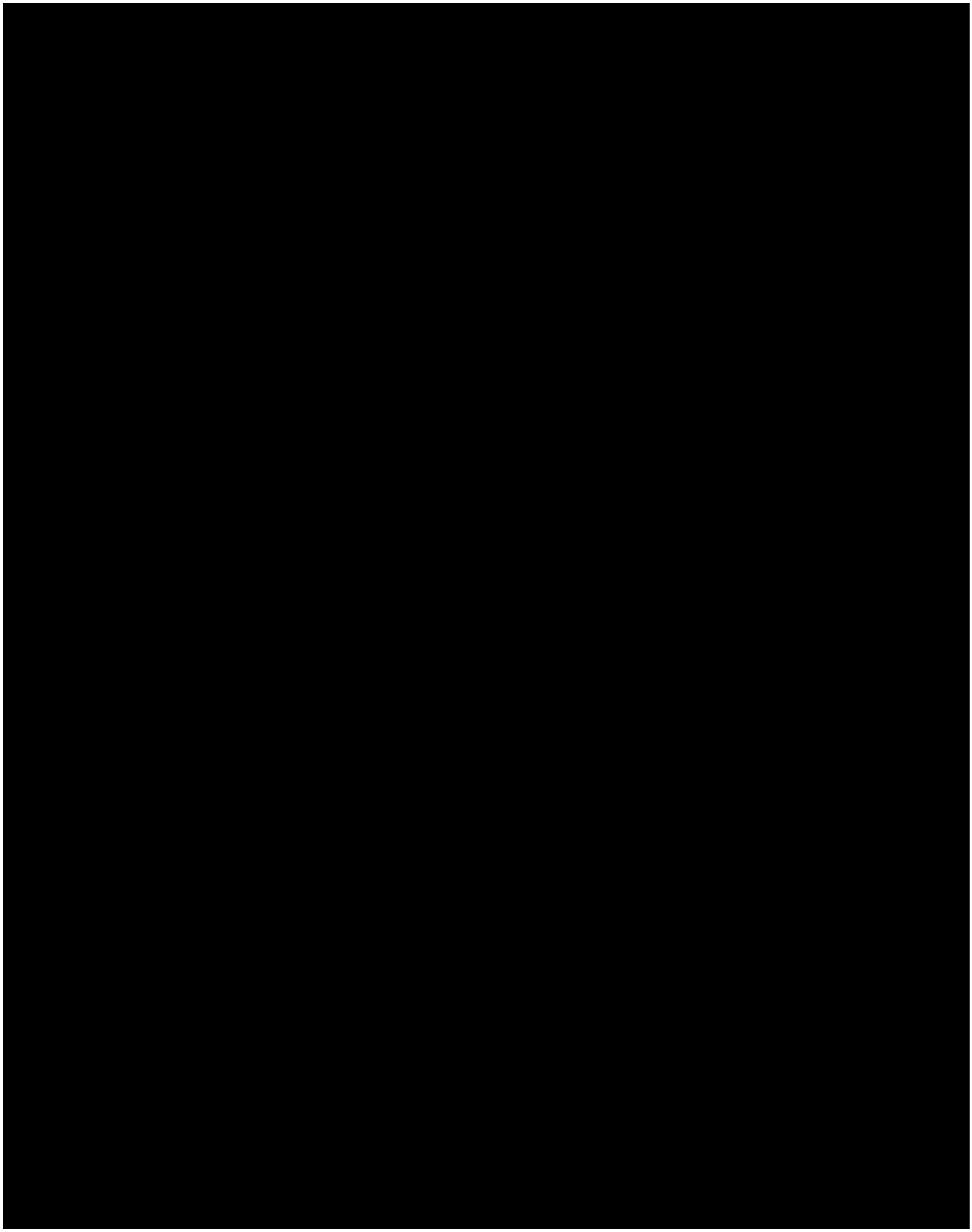
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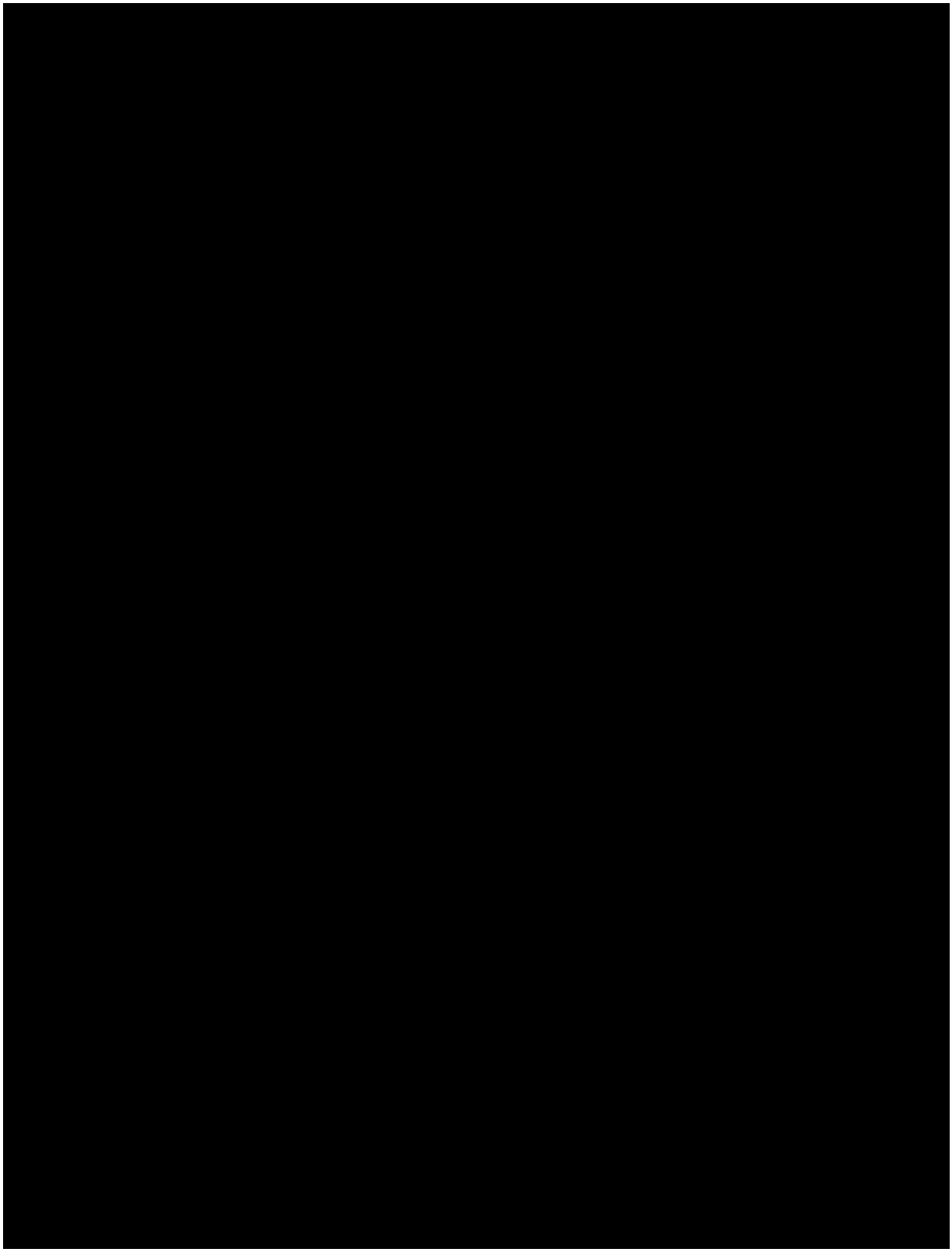
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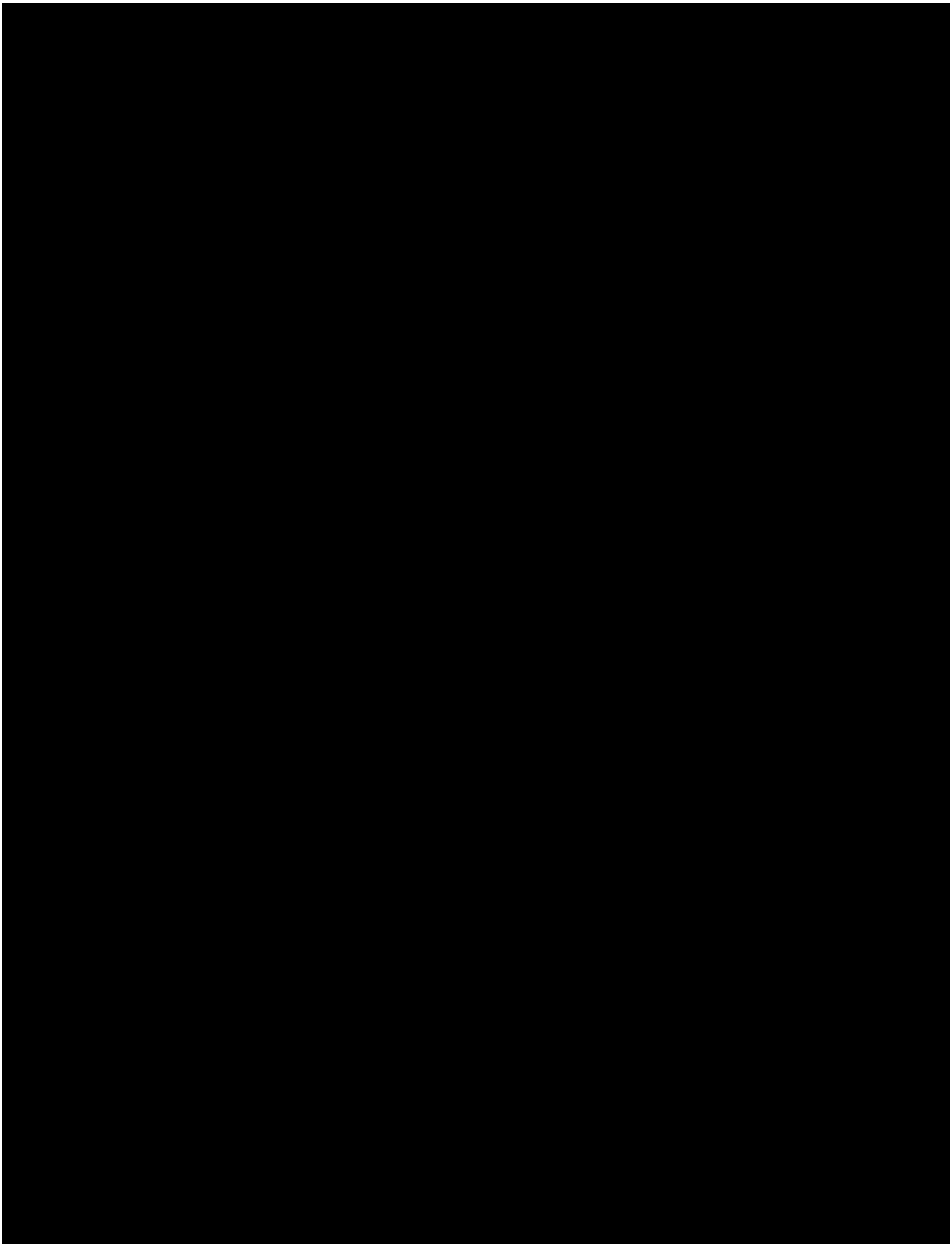
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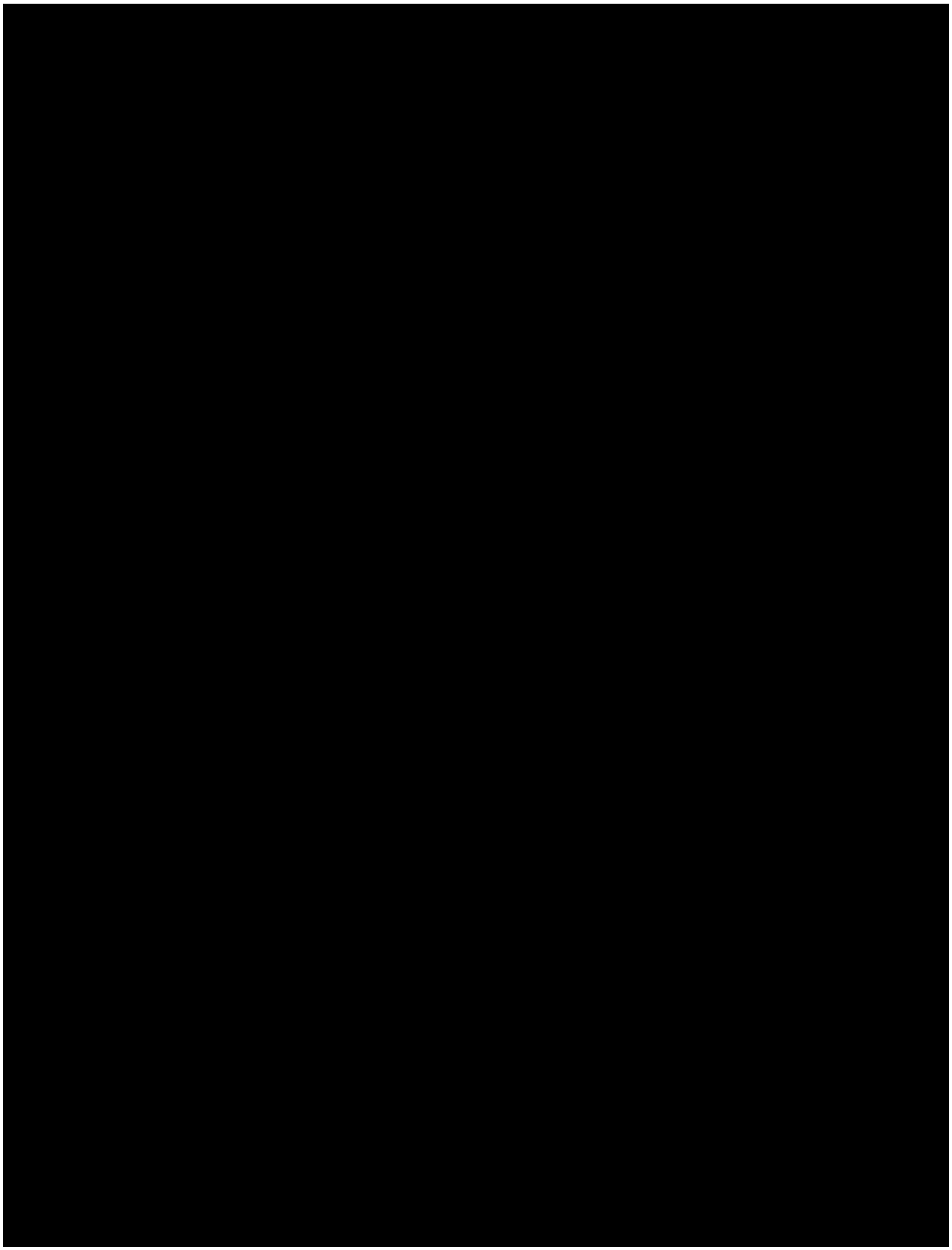
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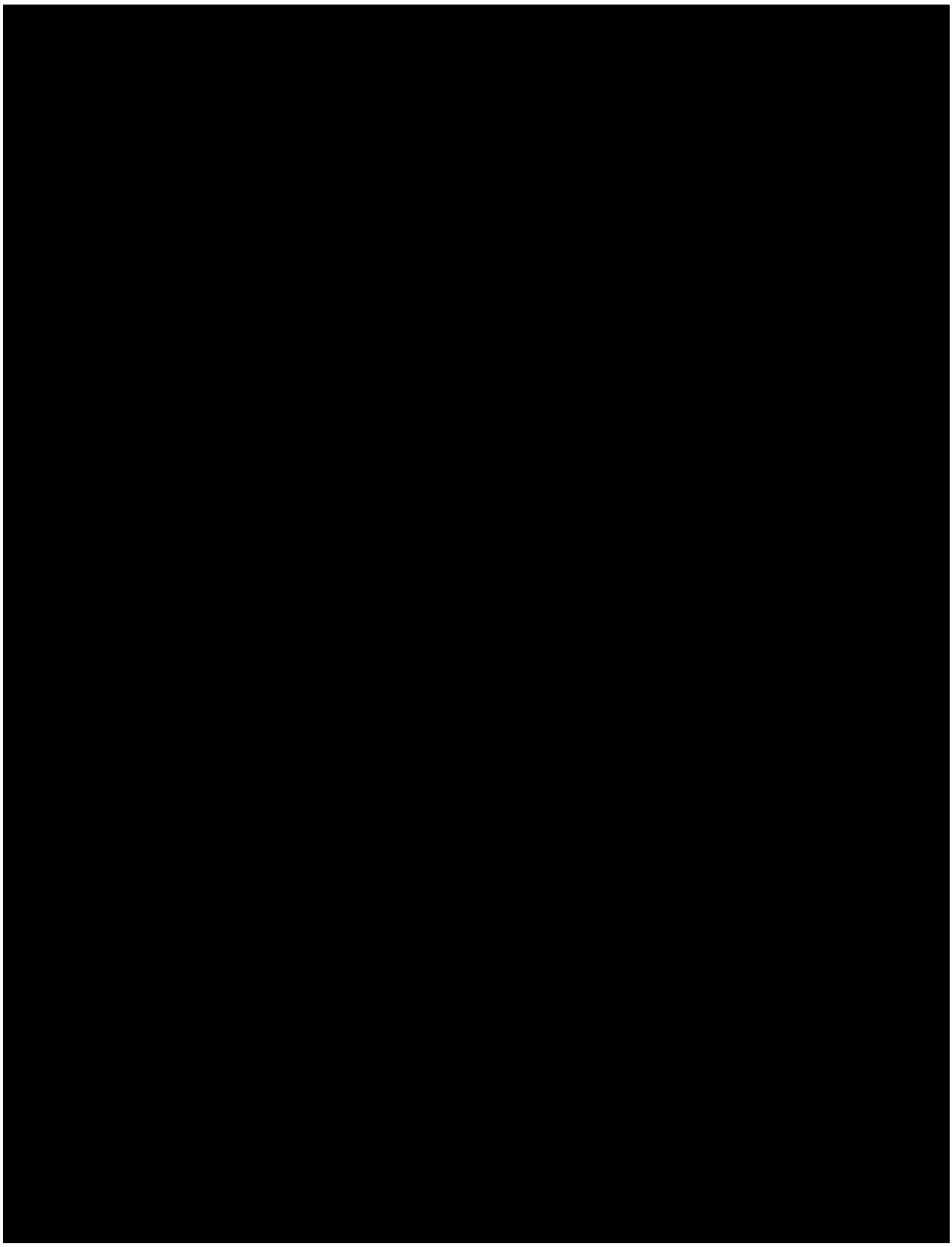
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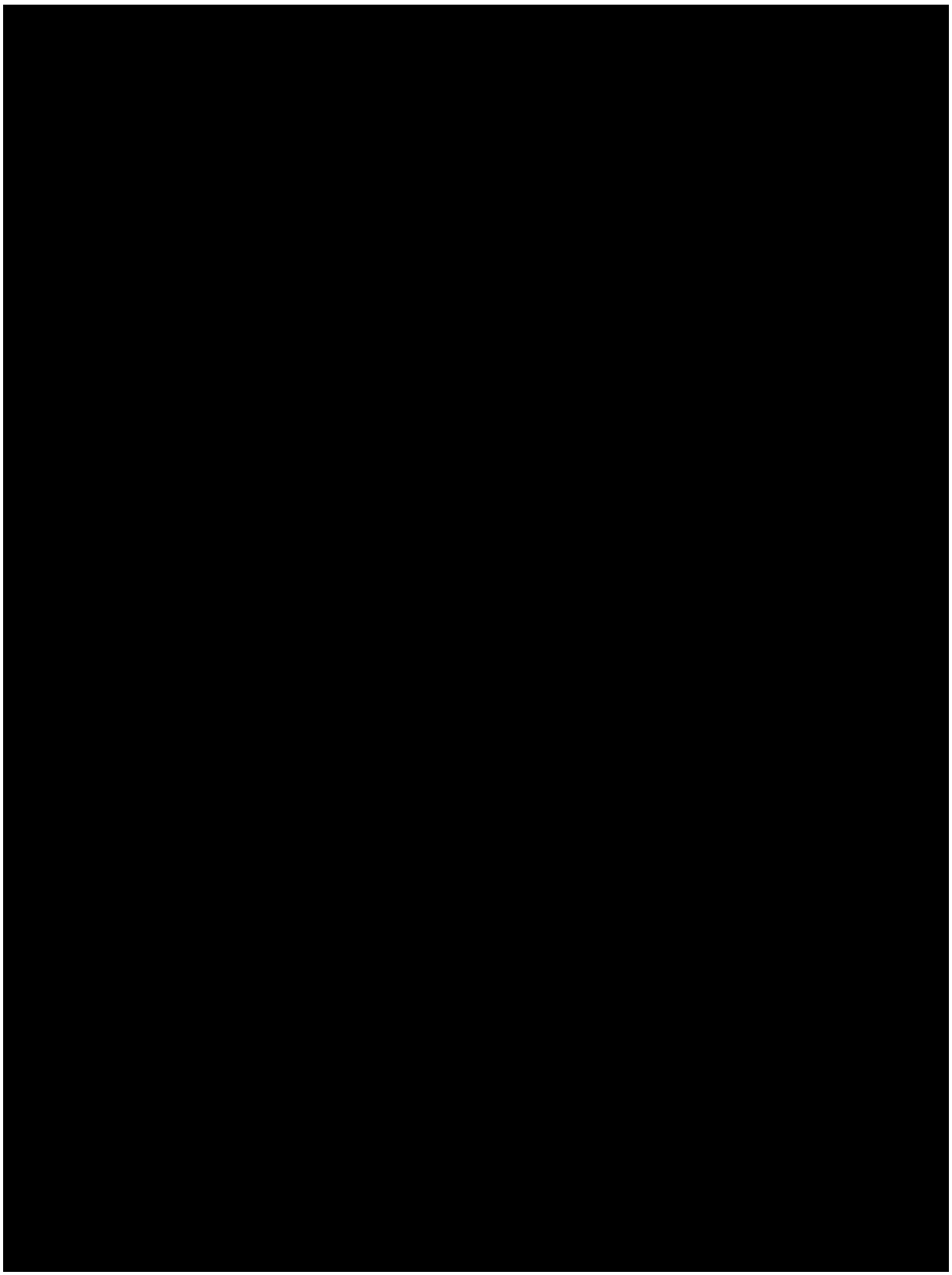
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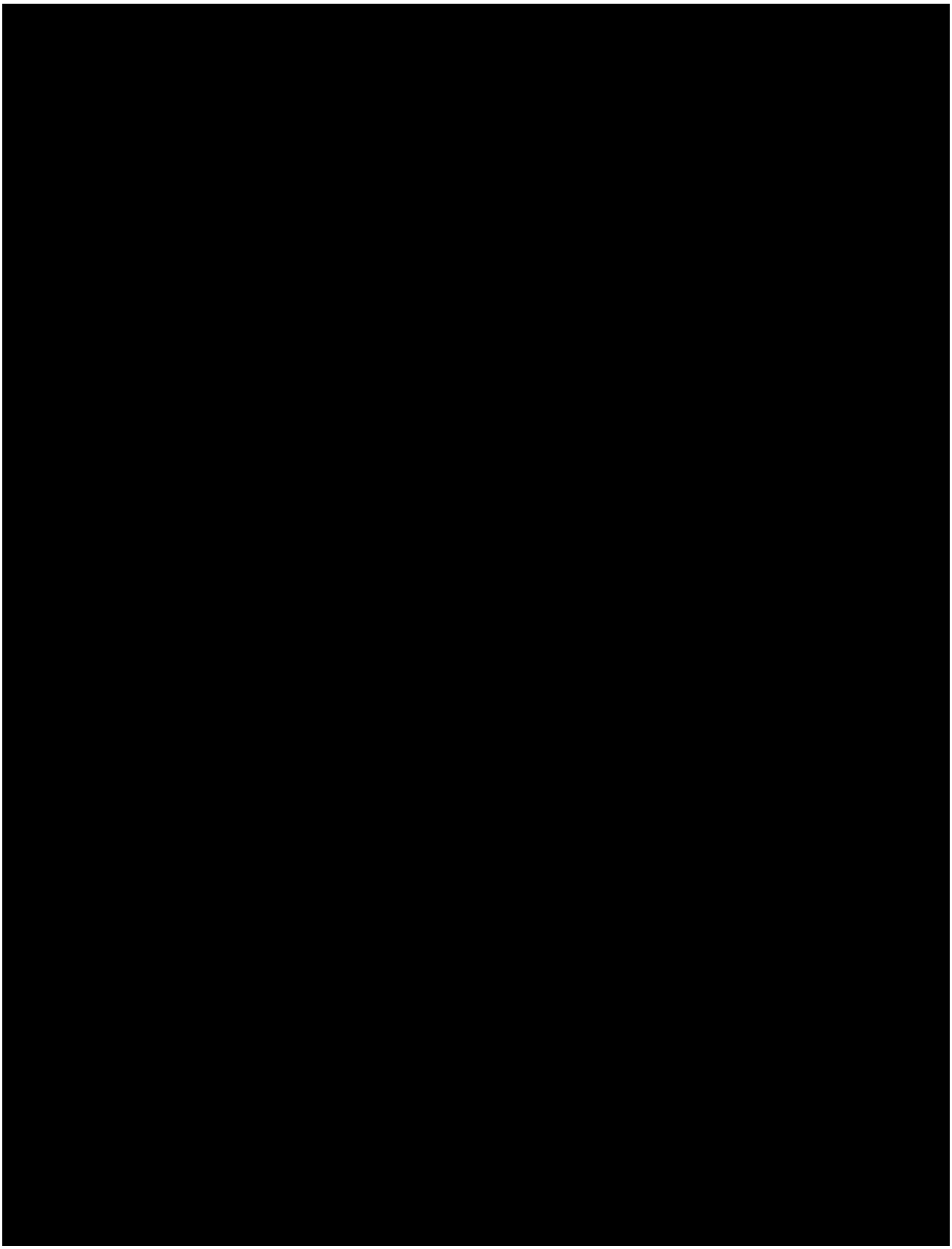
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O P E N S E S S I O N

BY MR. VIDWAN:

Q. Did you look at this cell when you visited or talked to GMBPower?

A. I don't know if it's exactly this cell. We visited a lot of different companies, but one thing I did find in my research is that a lot of companies just take screenshots of other companies. So this very well could be GMB, but I couldn't really attest to that.

Q. Looking at the specifications on the middle of this page, could those have worked for the ring that you were designing?

A. The dimensions down at the bottom say 10-millimeter width, 2-millimeter thickness. So our battery that we ended up using for our ring I believe was around 6 millimeters. So this is 4 millimeters wider, which would mean our ring, instead of being 8 millimeters wide, would have been 12 millimeters wide.

As you start getting down to the smaller ring sizes, like the size 6s and 7s, that becomes really unwieldy for people with really small hands. So this wouldn't have been an option for us. We were pretty dedicated to making the form factor that way we wanted to make it, which was more like a wedding ring form factor, instead of like an artsy kind of, you know, more fashion-forward ring.

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The capacity on this seems a little bit high. I don't recall any batteries in that kind of size that would be even close to that number.

Q. If you can look at the second page of this document, do you see where the smallest ring sizes -- I mean, sorry, smallest curved cell?

A. Yes.

Q. Was -- sorry, go ahead.

A. So the milliamp hours is probably closer to reality for that one, but, yeah.

Q. Would this have worked for the ring design that you were making?

A. The dimensions, again, are too big for what was -- they were too big for our application. I think, secondly, the charge time is pretty big. We were trying to go for under two-hour charge time. We had a lot of customer feedback that they don't want to wait all day to charge the ring.

I think, secondly, looking at this one, the discharge current is pretty small. If you take .2 times 25, that gives you maybe 5 milliamps of discharge that you could have. We had at times 120-milliamp spikes in our design for being able to run like the PBG and the Bluetooth.

I think most of the time, the Bluetooth would run about 12 to 15 milliamps if you're continuously

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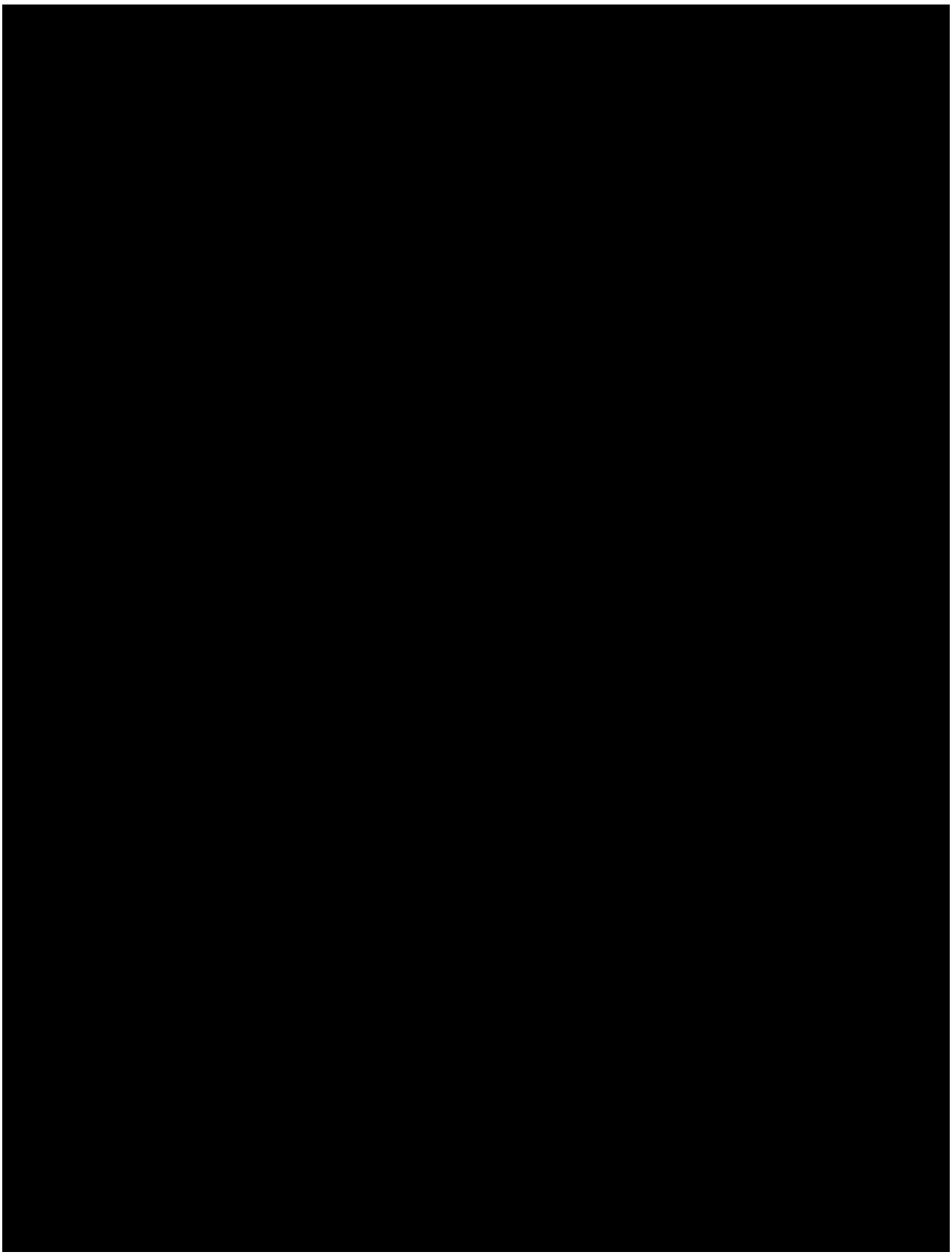
transmitting. And then the PPG sensor was probably on the order of tens of milliamps. I don't remember the exact number, but if your battery is only capable of discharging 5 milliamps, then usually the repercussions are that your voltage rail drops and then it doesn't work, so you start resetting things.

And then, secondly, a lot of times, the battery vendors won't support any warranty-related issues. So if we have thousands of rings that are failing because we're drawing too much current from them, then the vendor would just say, well, you're drawing more than we said you should be drawing. So that would be a problem as well.

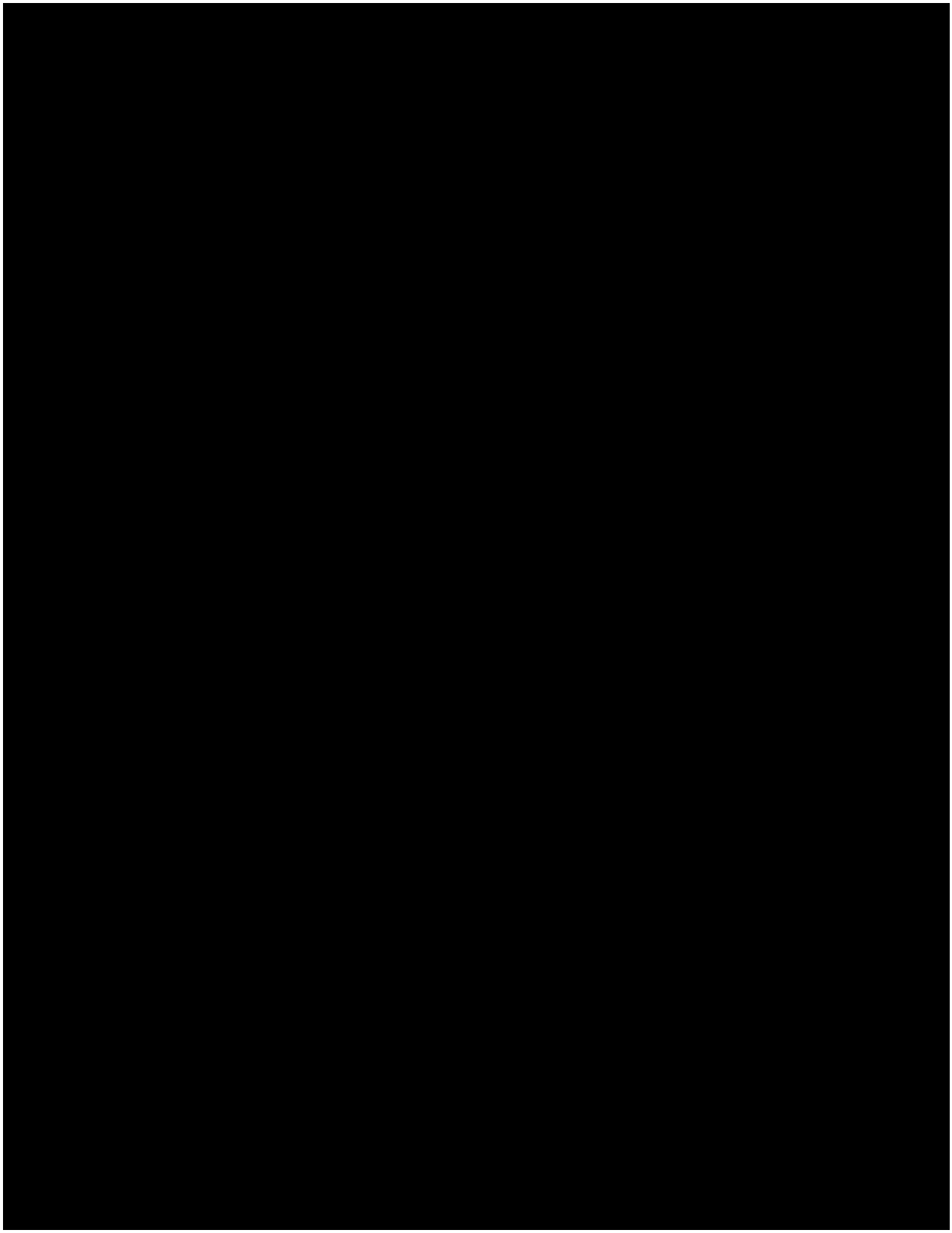
Q. We can take this down.

(Whereupon, the hearing proceeded in confidential session.)

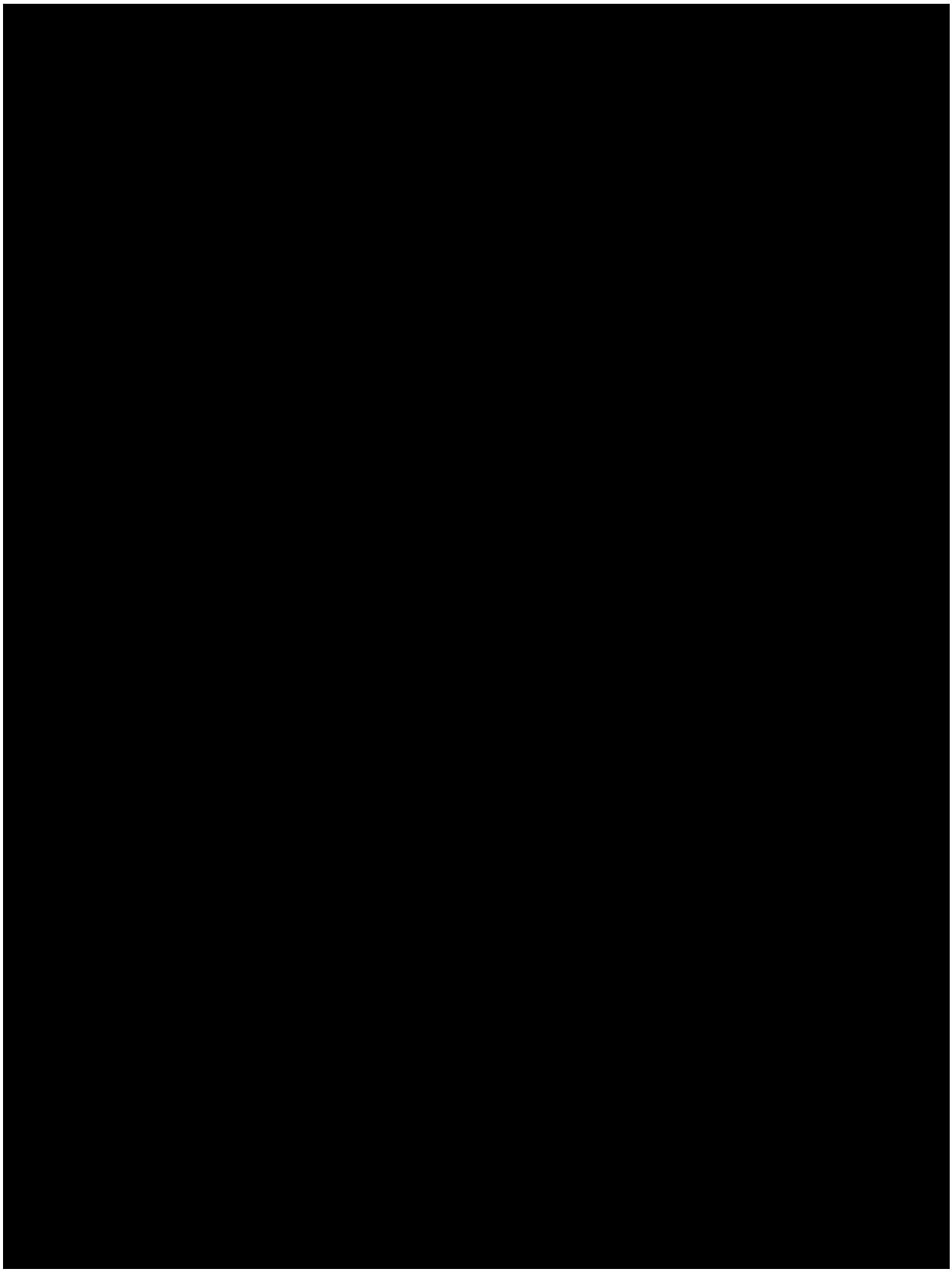
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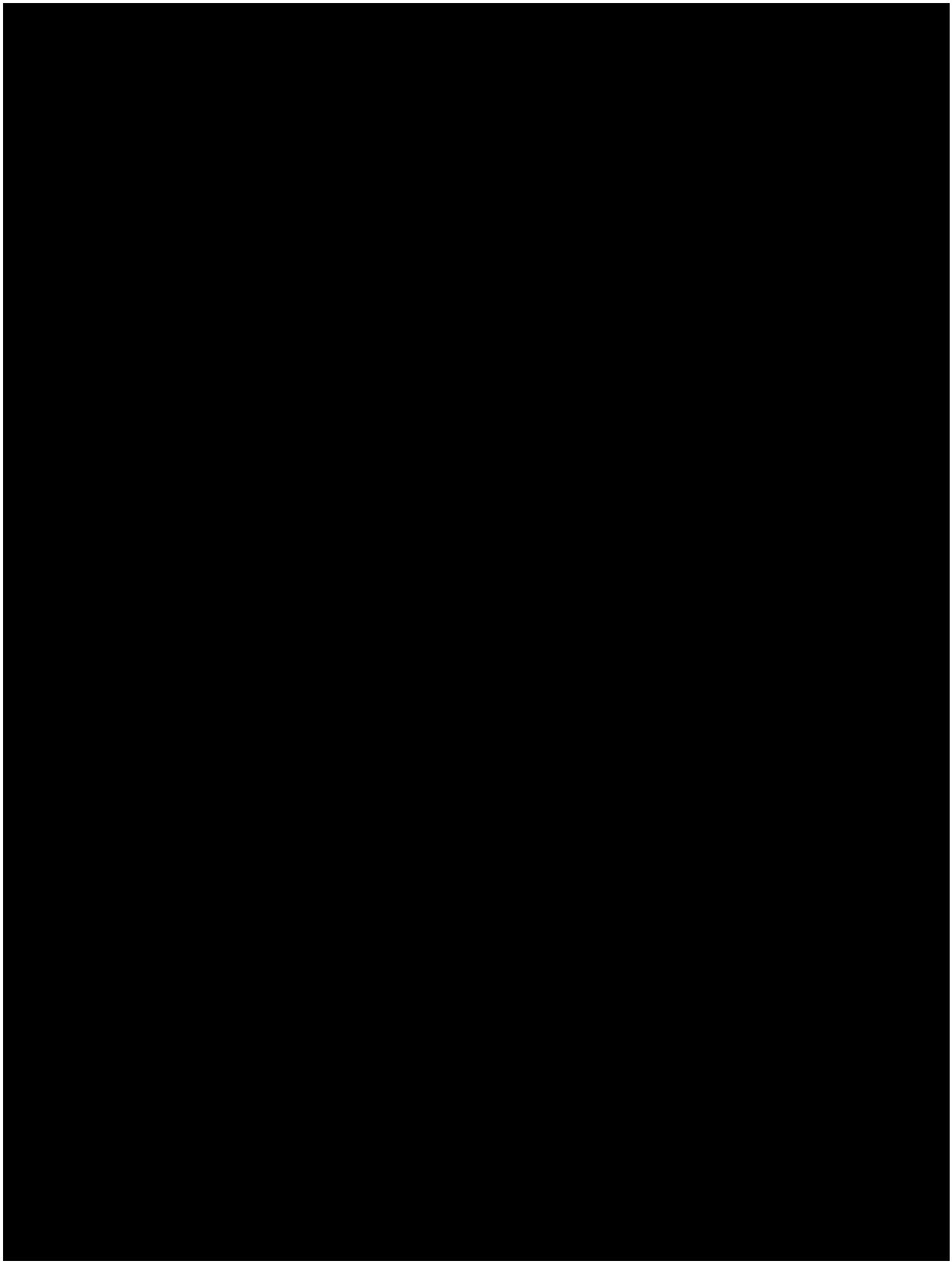
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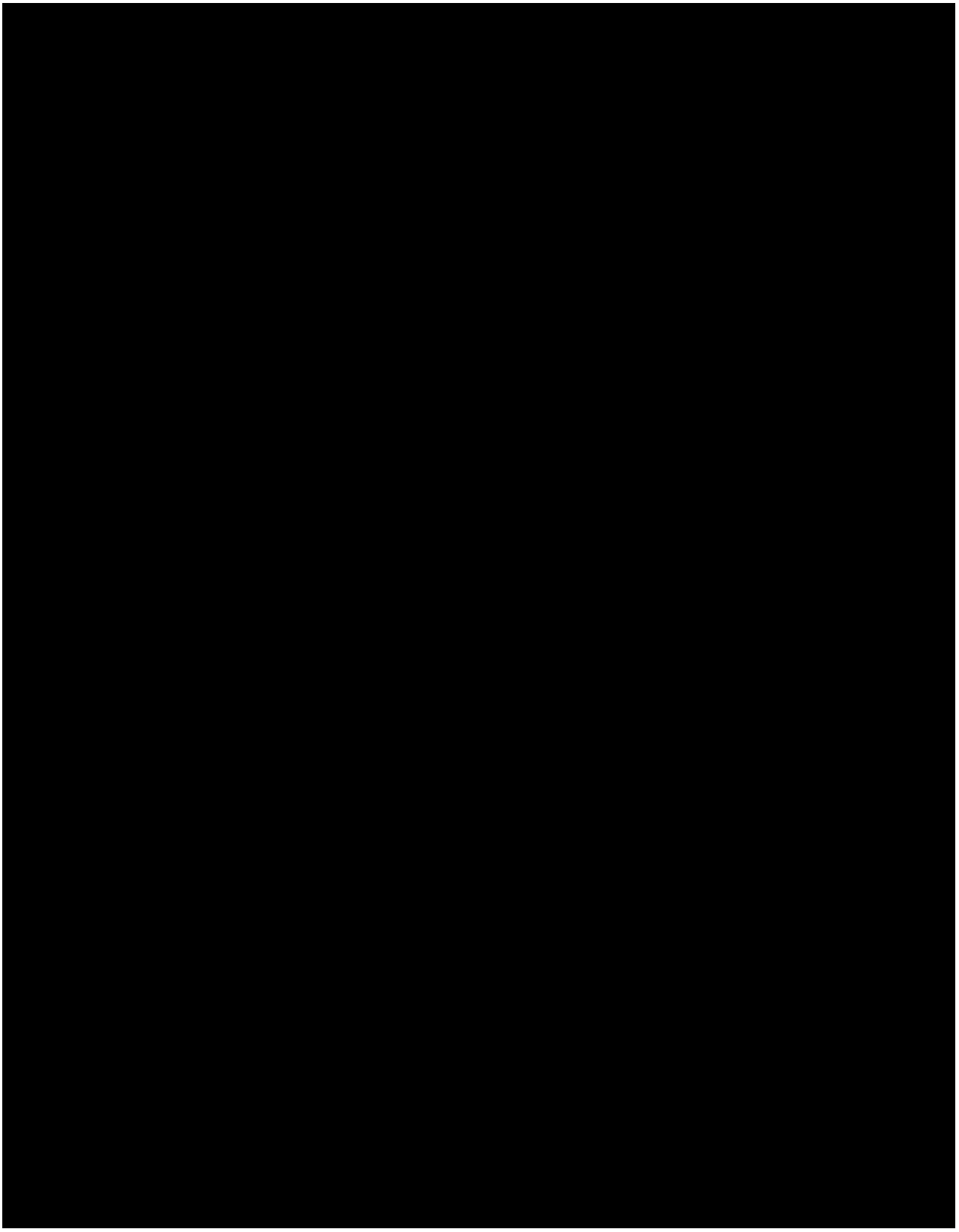
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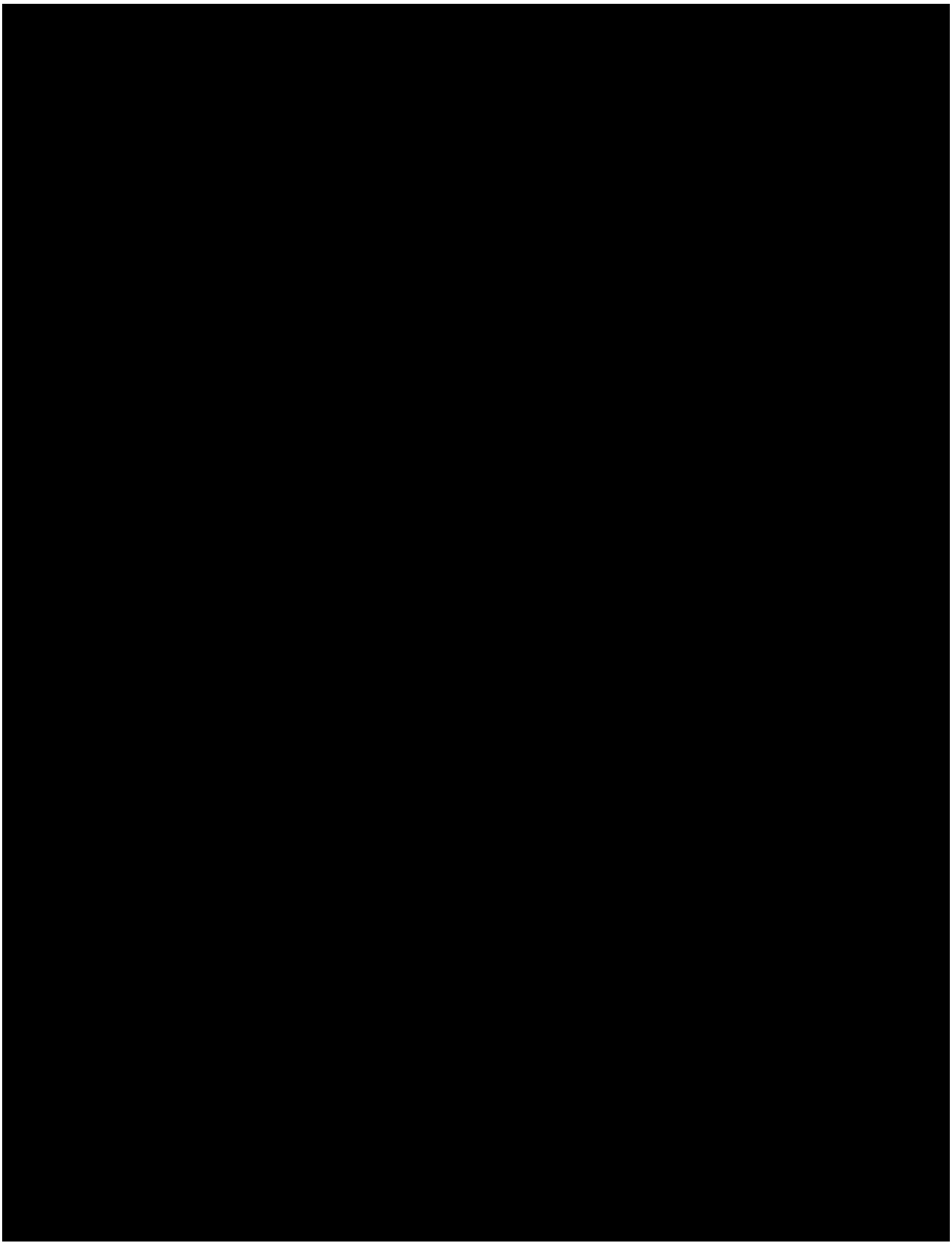
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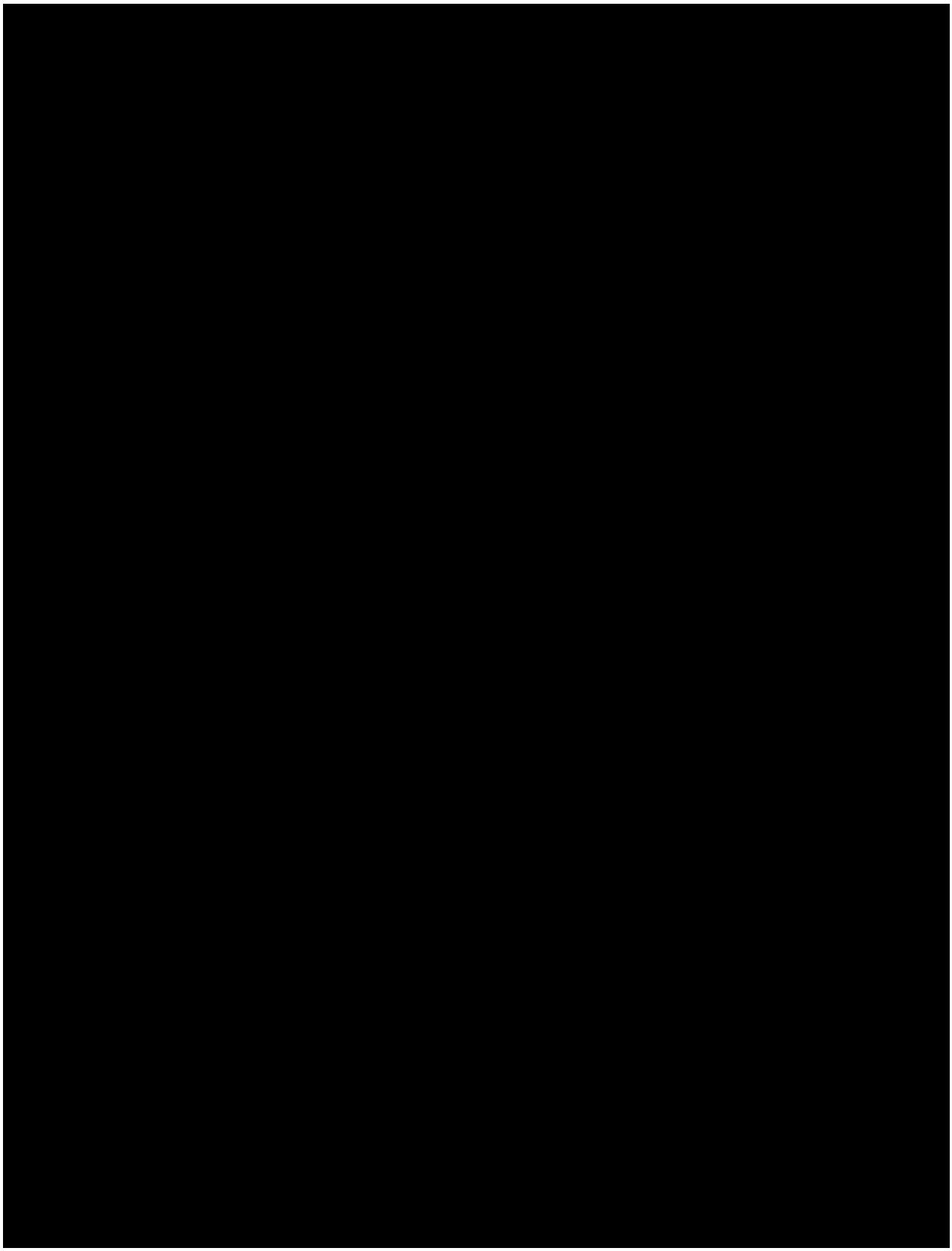
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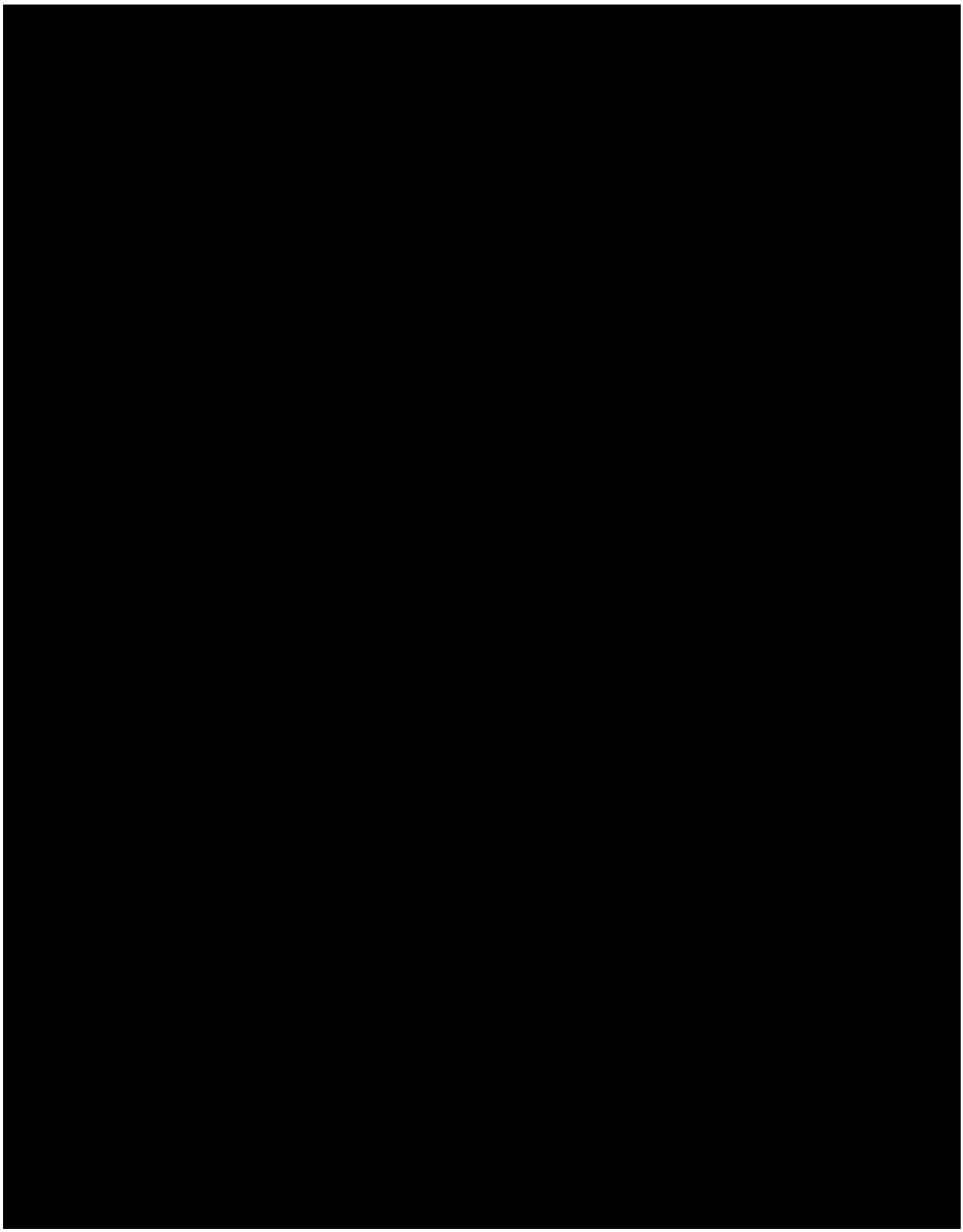
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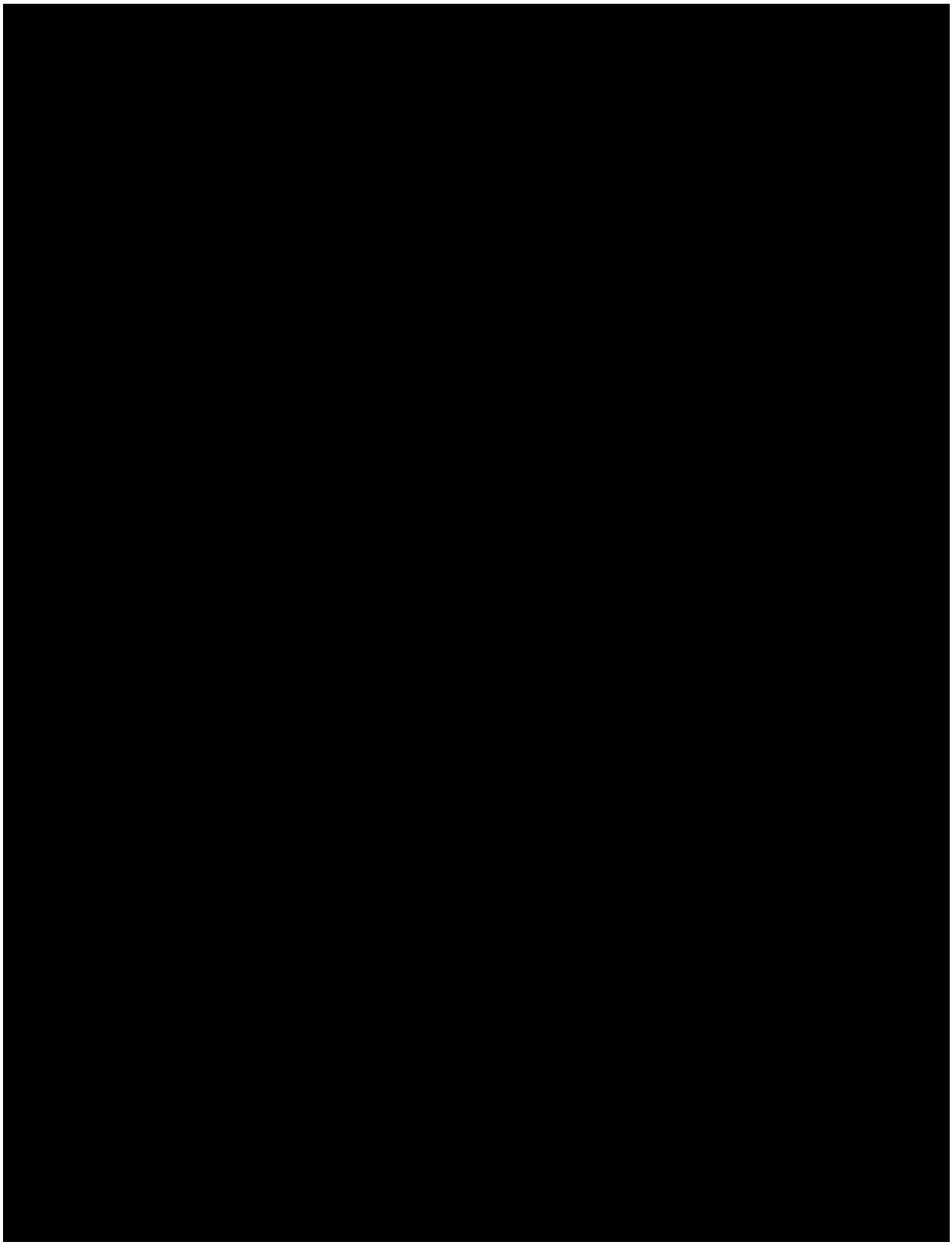
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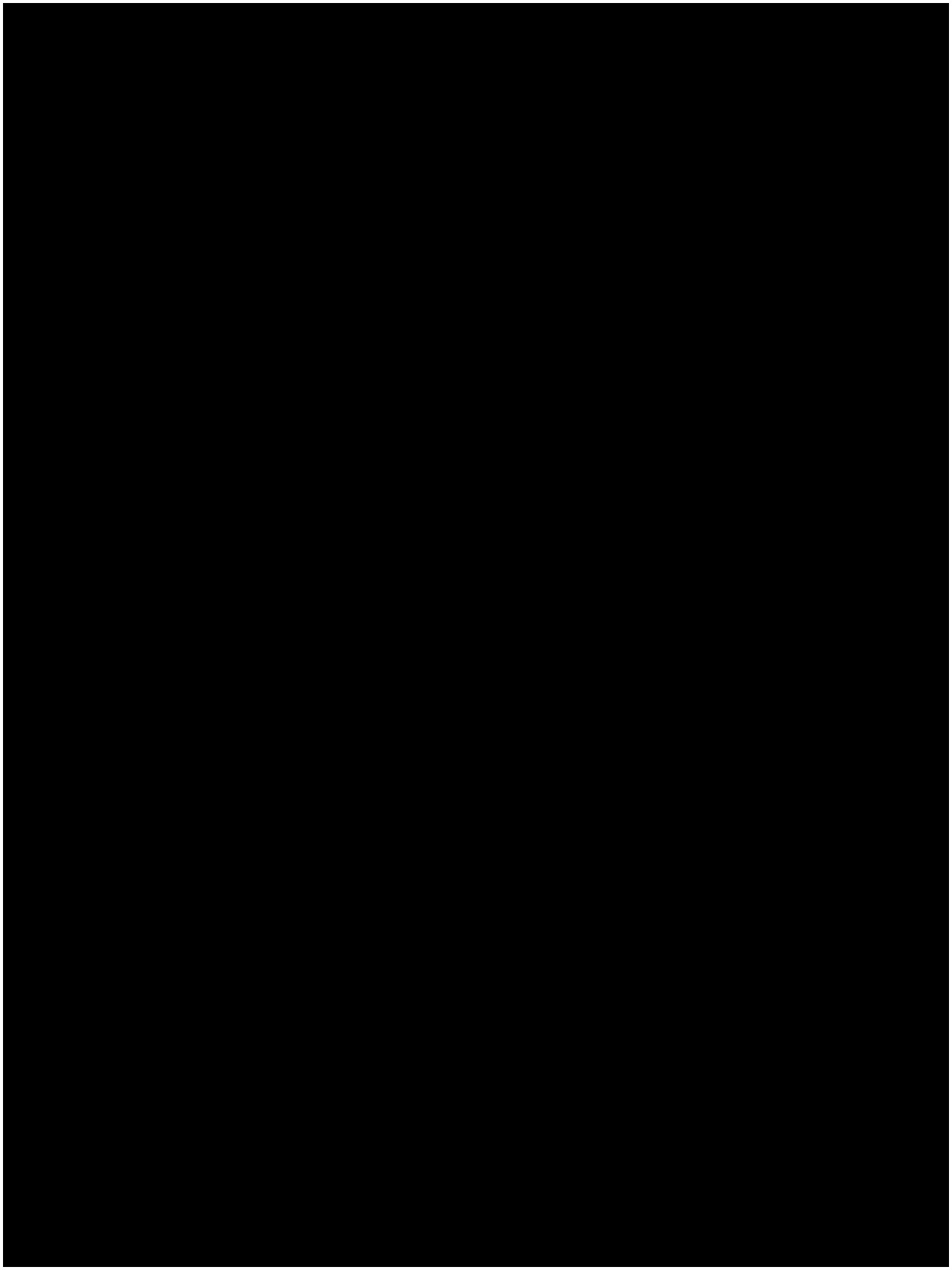
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O P E N S E S S I O N

MR. POWELL: The smart rings track steps so every time they go out and back in, they're getting their steps in.

THE WITNESS: If the algorithms are right.

MR. POWELL: And, Your Honor, we haven't met before. My name is Mike Powell with the Cadwalder team. It's a pleasure to be here.

JUDGE JOHNSON HINES: Thank you.

CROSS-EXAMINATION

BY MR. POWELL:

Q. And likewise, Mr. von Badinski, we haven't met before. My name is Mike Powell.

A. Nice to meet you.

Q. It's nice to meet you.

A. Yeah. You did my name perfectly by the way. Good job.

Q. You have one of the more interesting -- you have a, you know, memorable last name, I will say.

A. It has been butchered many times at Starbucks.

Q. Mr. von Badinski, you have a binder in front of you. I'd like you to turn to RX-0295C. Can you testify about how you're getting paid?

MR. VIDWAN: Your Honor, this is a confidential exhibit.

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JUDGE JOHNSON HINES: All right. Do we need to go --

MR. POWELL: Okay.

JUDGE JOHNSON HINES: We can go on the confidential record.

MR. POWELL: If he's saying it's confidential, then that's okay. We can go back on the confidential record. I don't really see how it's confidential, but --

JUDGE JOHNSON HINES: Actually, I mean, I don't either, but --

MR. VIDWAN: Your Honor --

JUDGE JOHNSON HINES: I know it's labeled that way. It just doesn't --

MR. POWELL: It's just a contract that's signed, so -- but it's not my call to make.

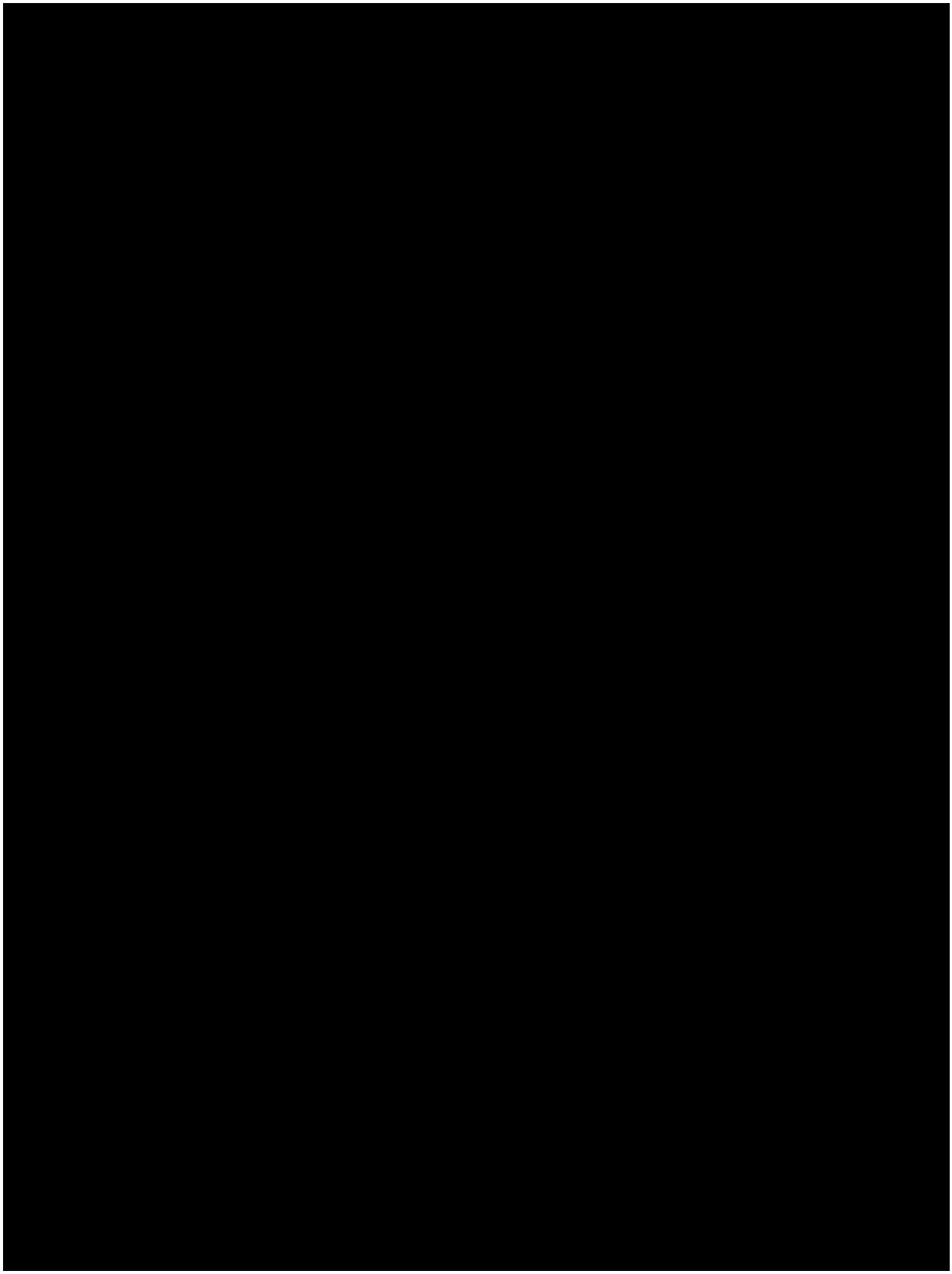
MR. VIDWAN: Your Honor, because the terms of the agreement are in there, that's why we are saying that it's confidential.

MR. POWELL: I don't think there's a confidentiality provision but --

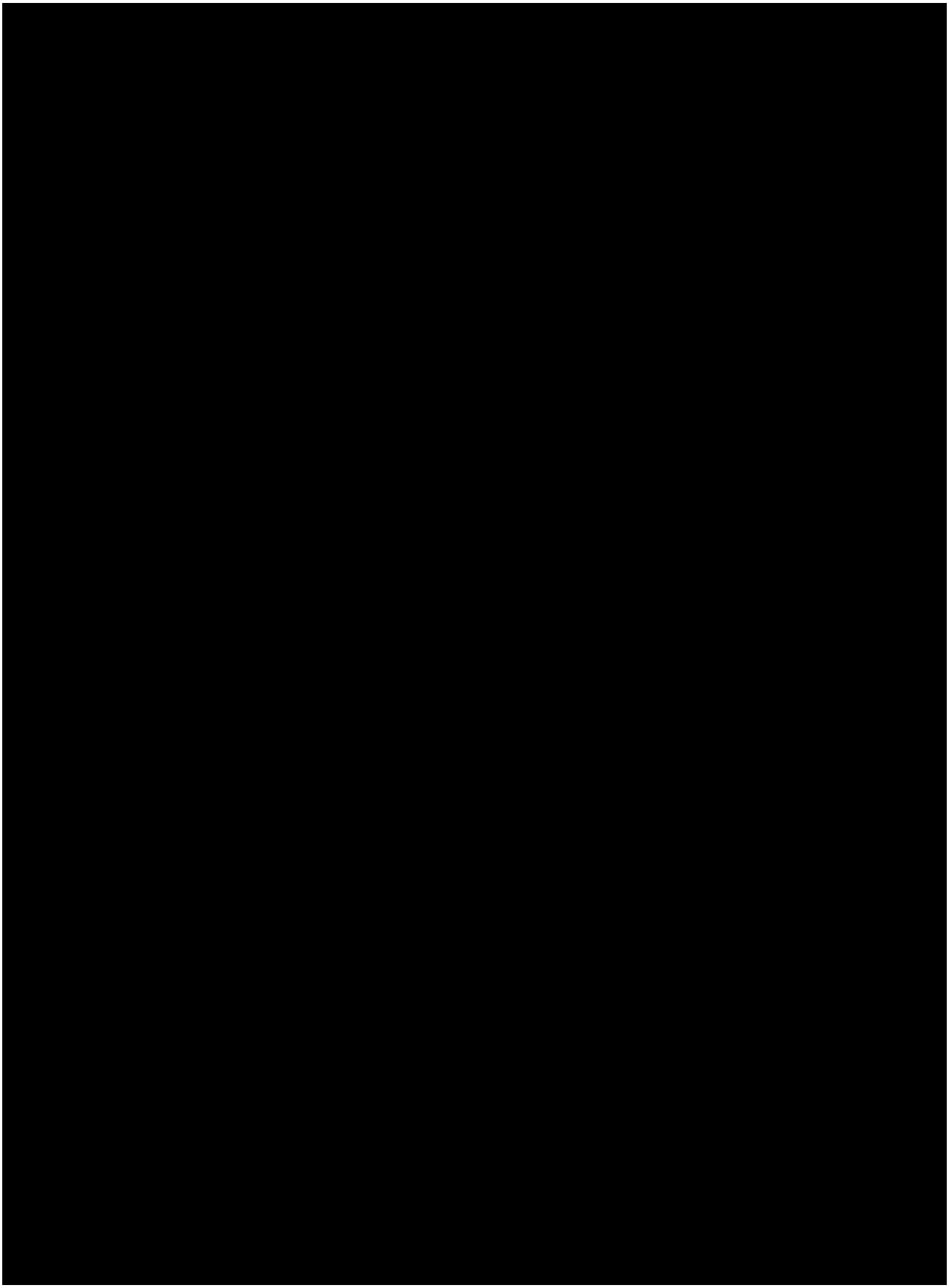
JUDGE JOHNSON HINES: We'll go on the confidential record.

(Whereupon, the hearing proceeded in confidential session.)

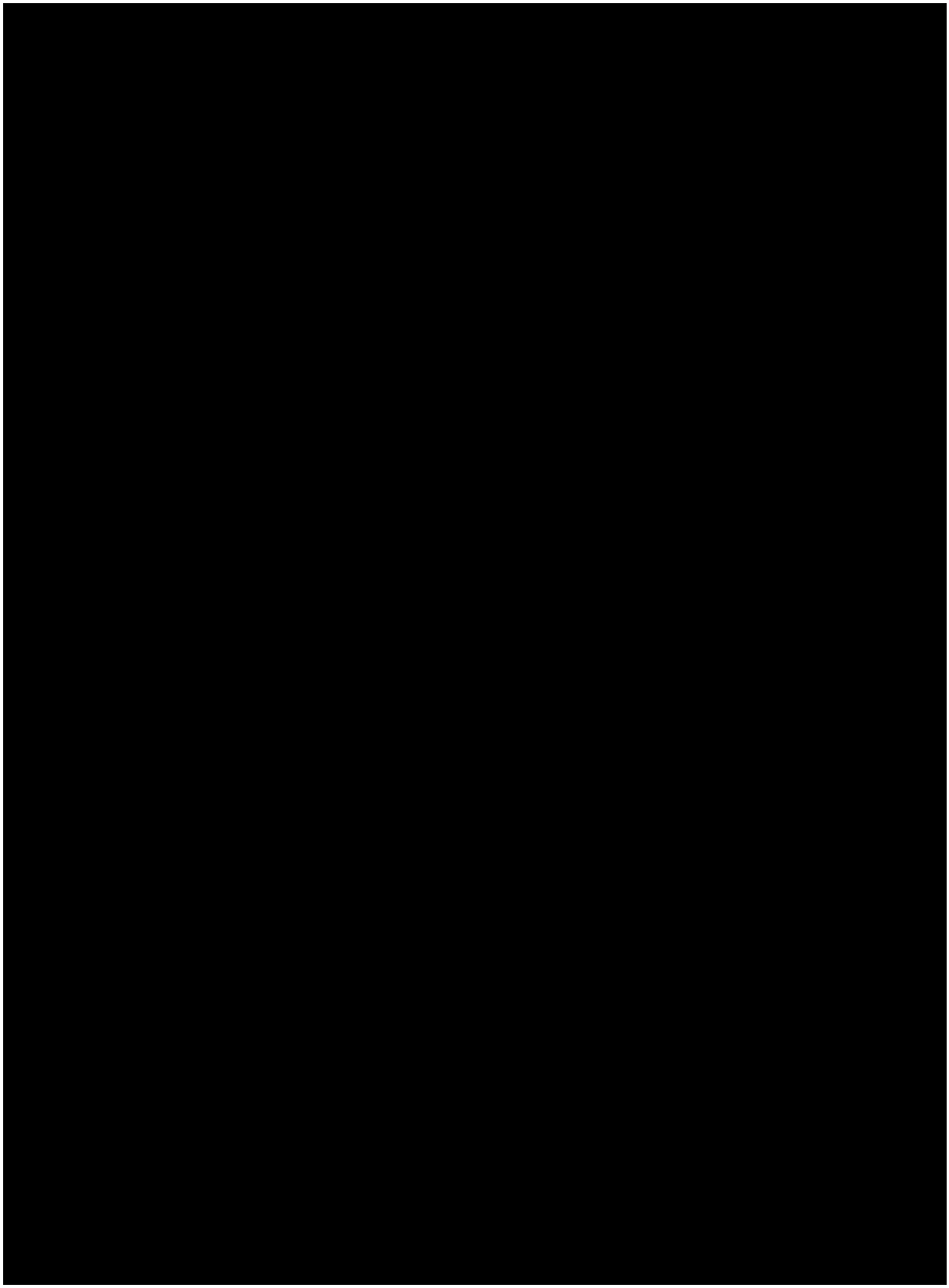
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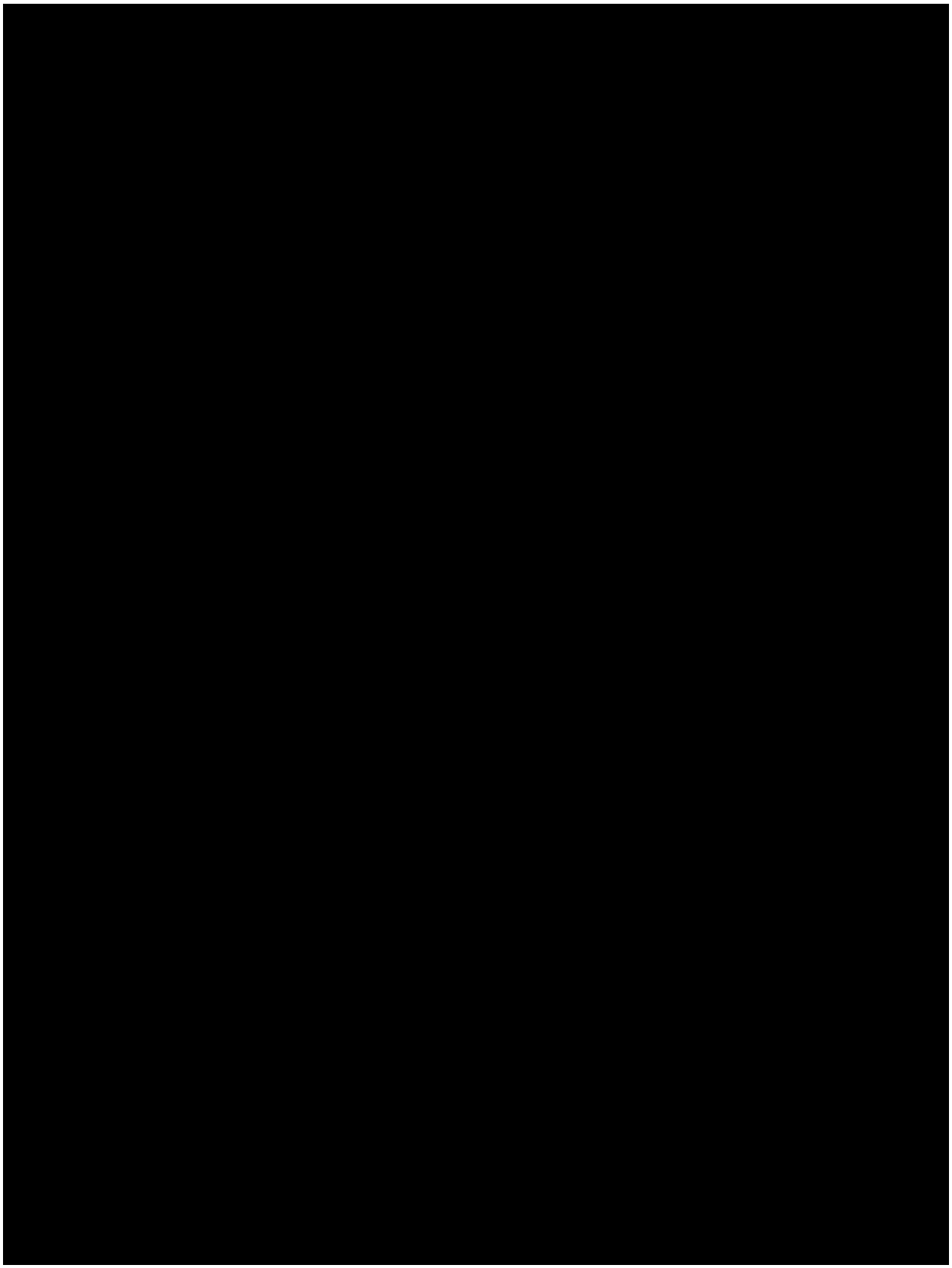
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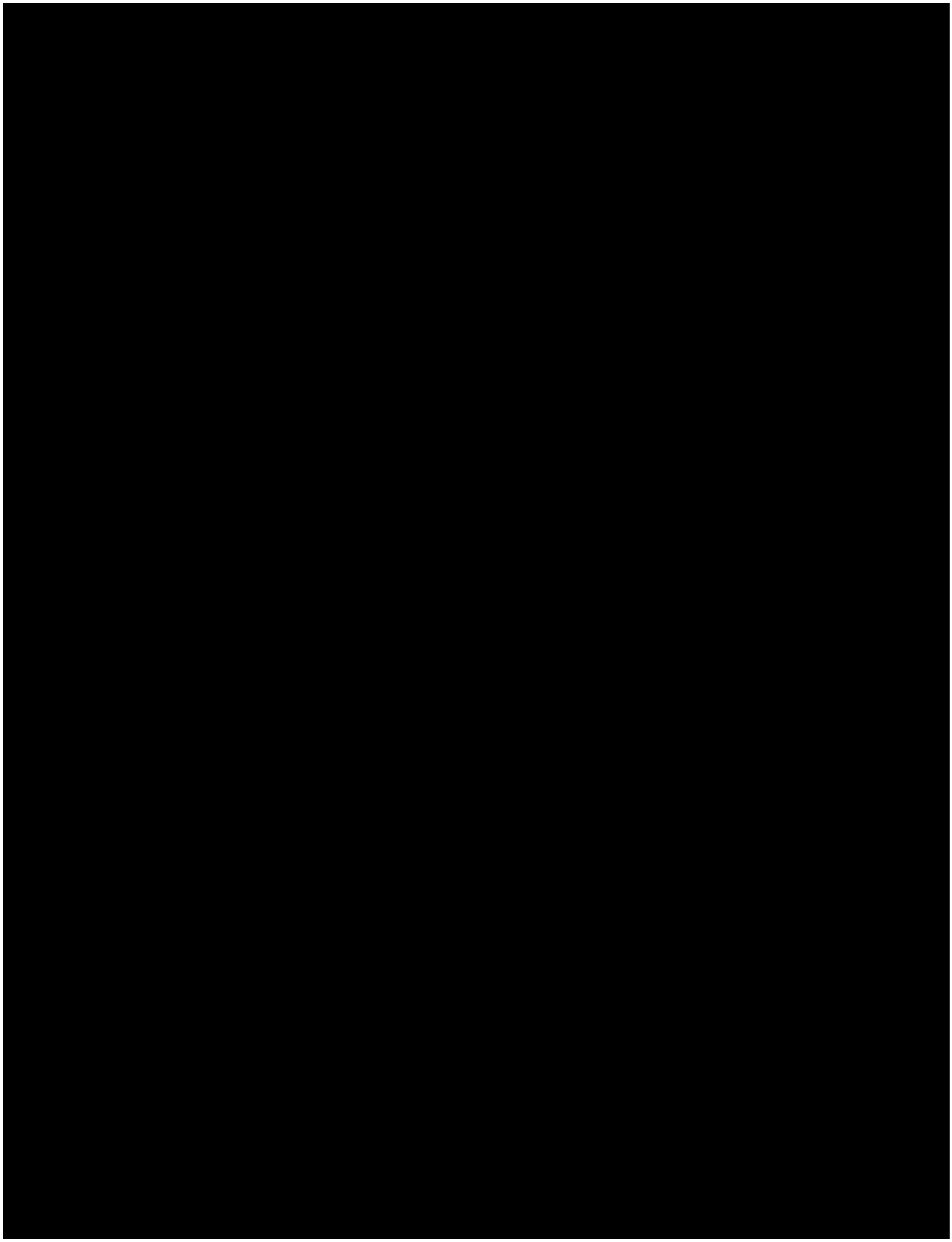
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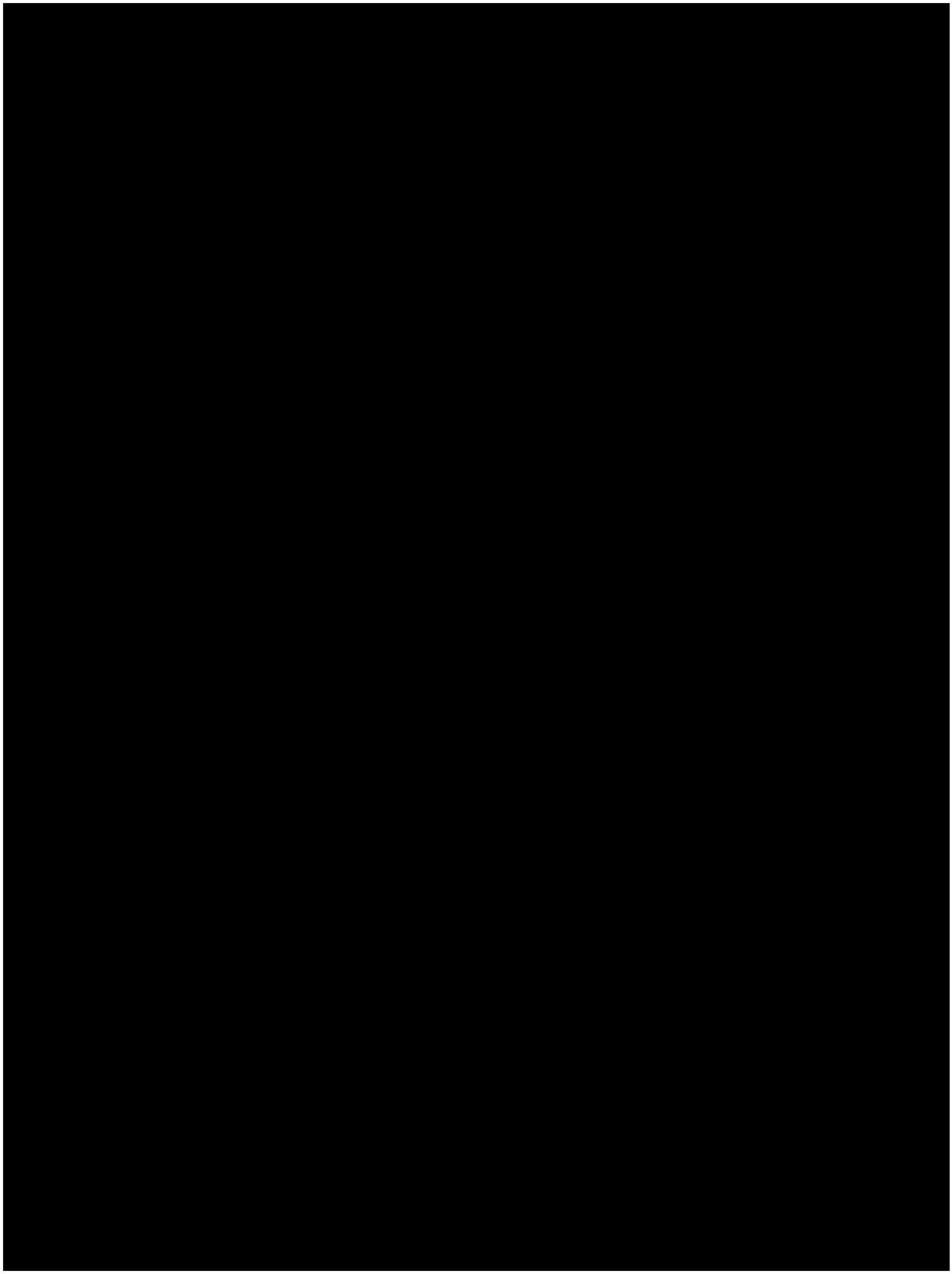
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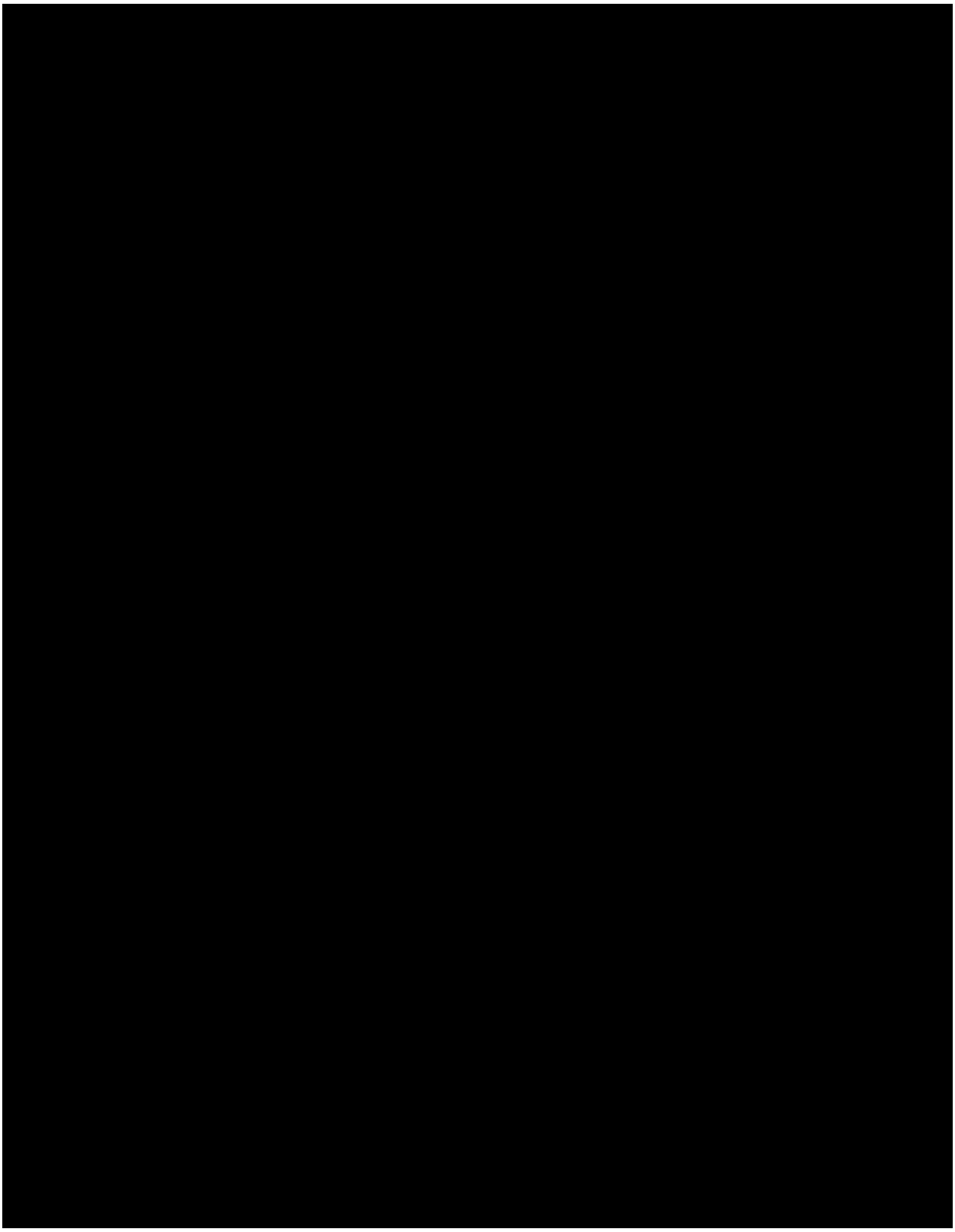
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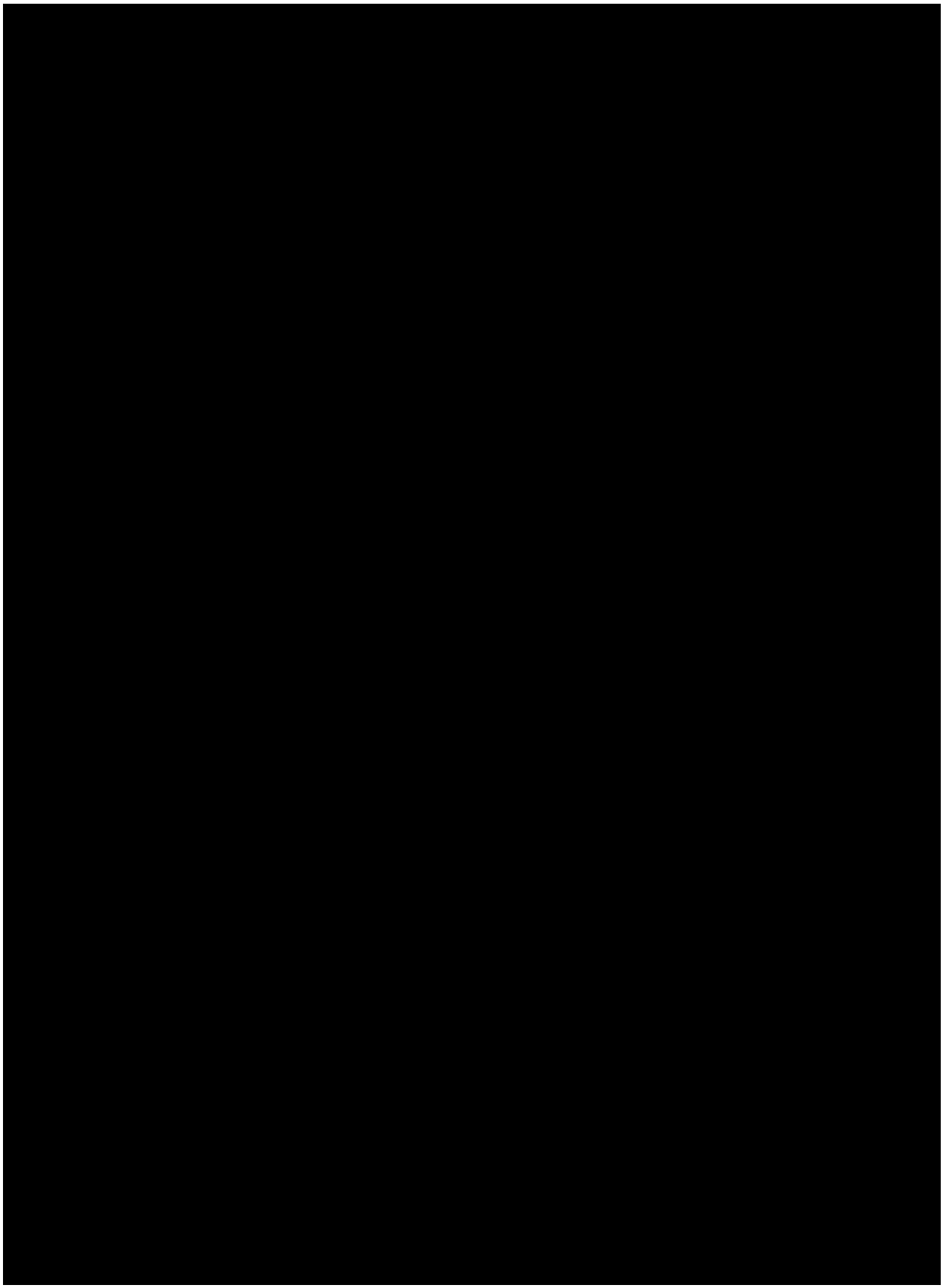
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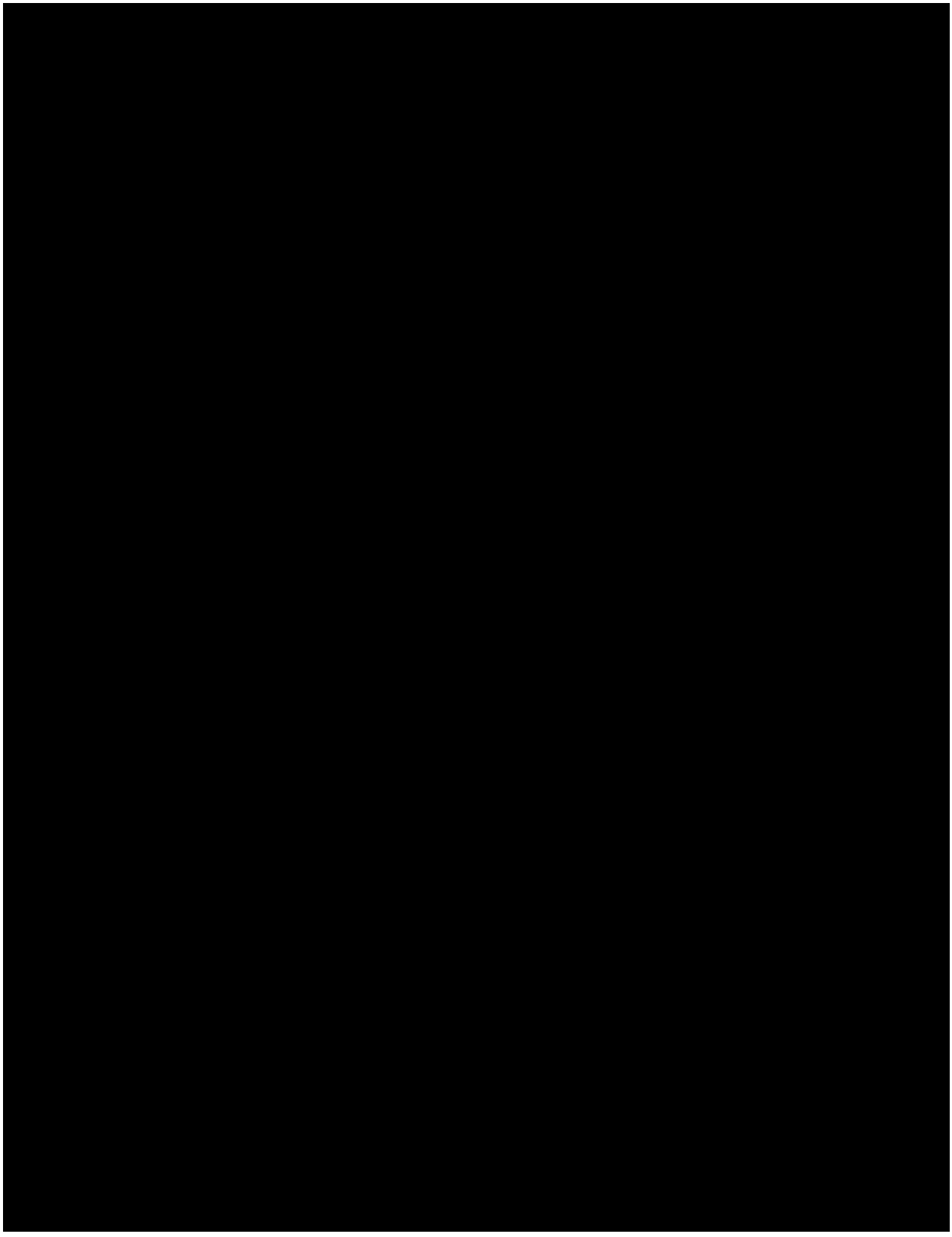
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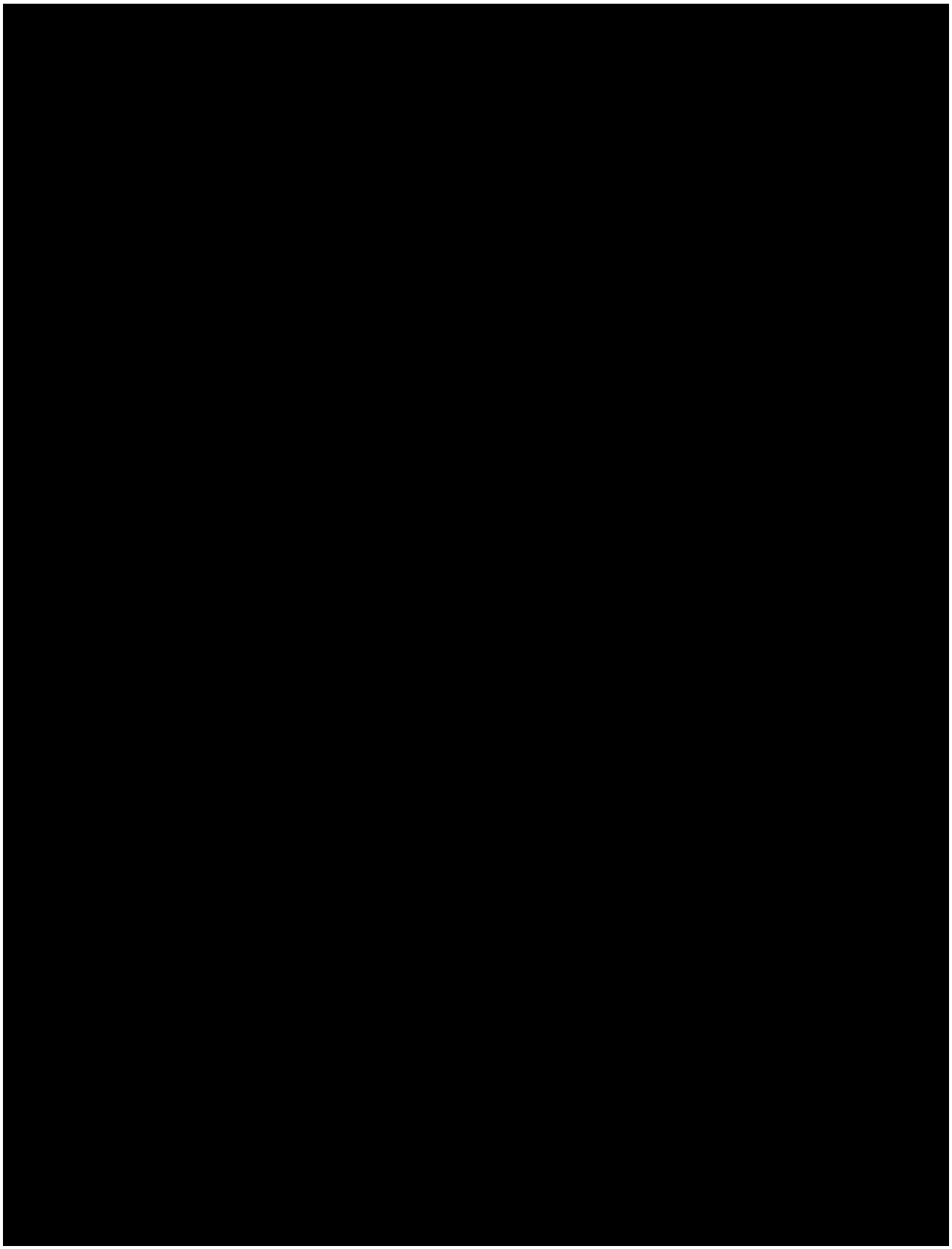
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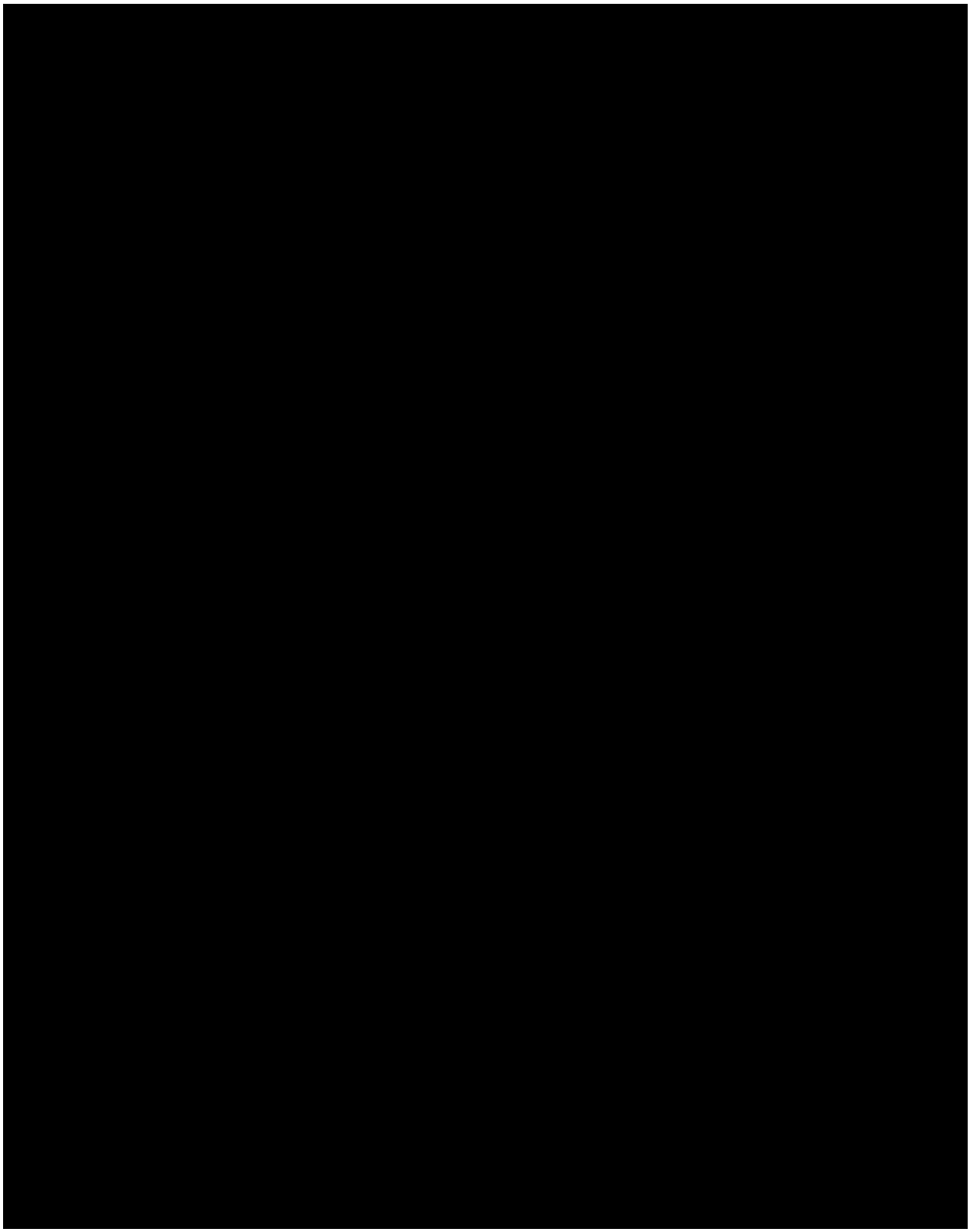
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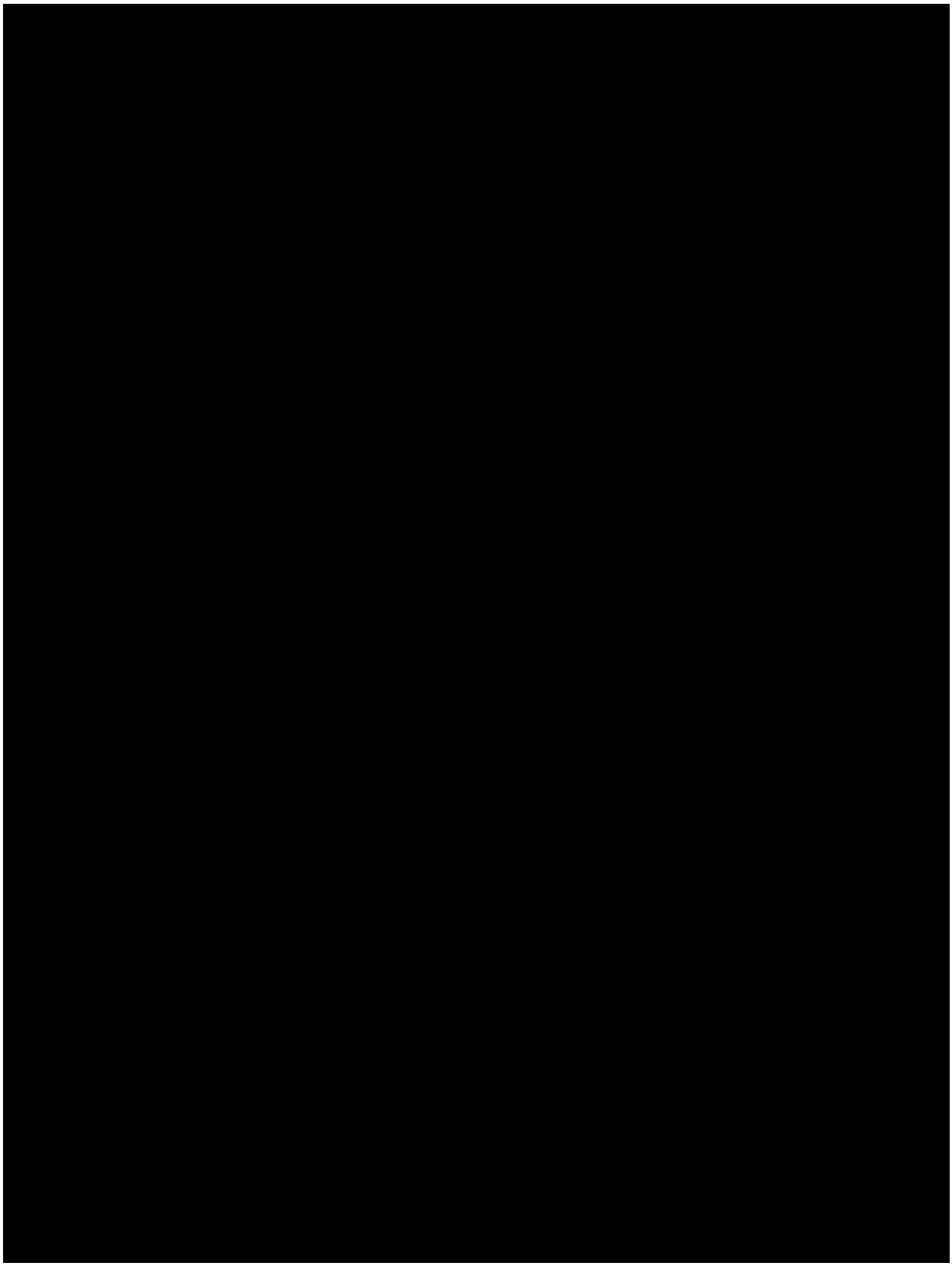
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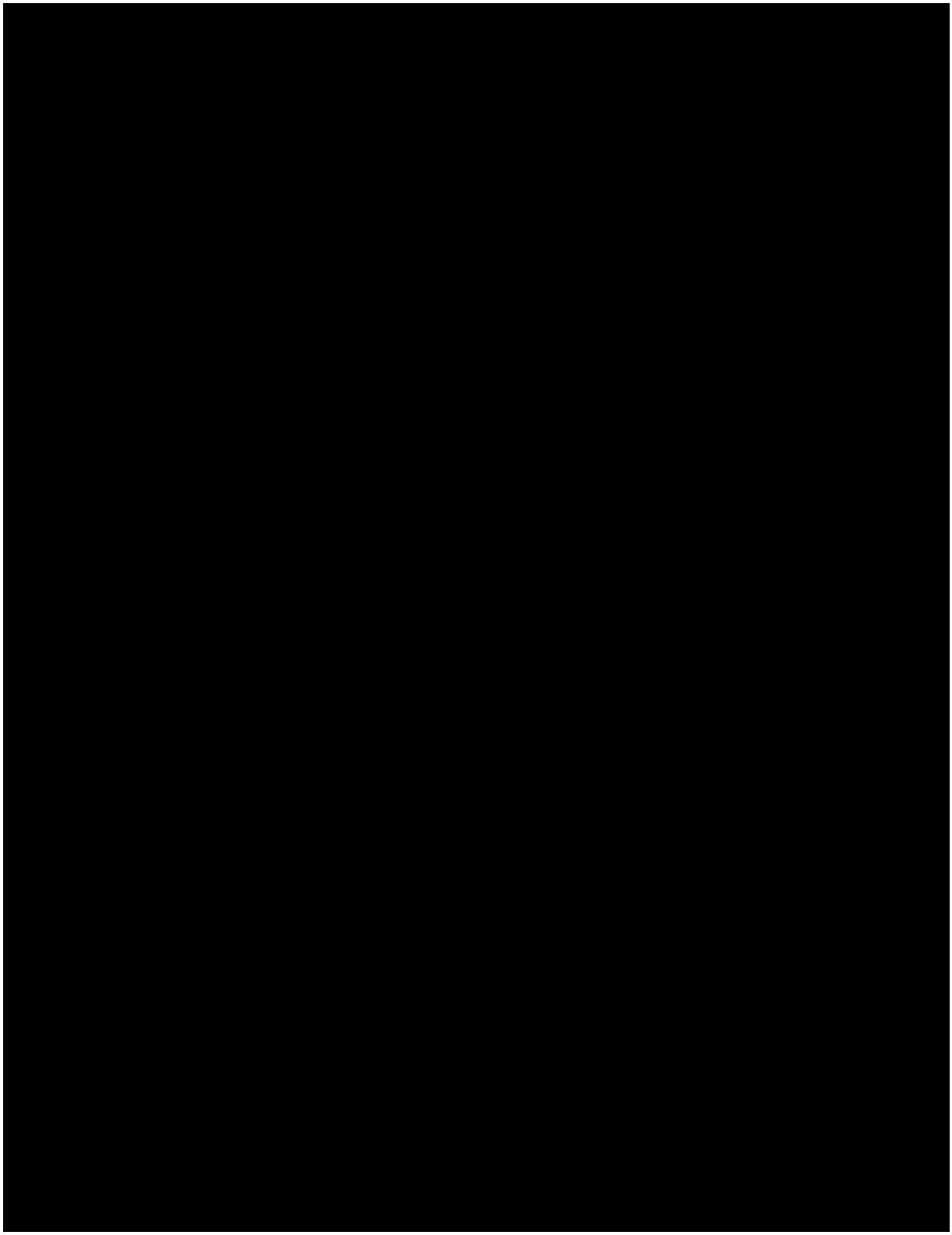
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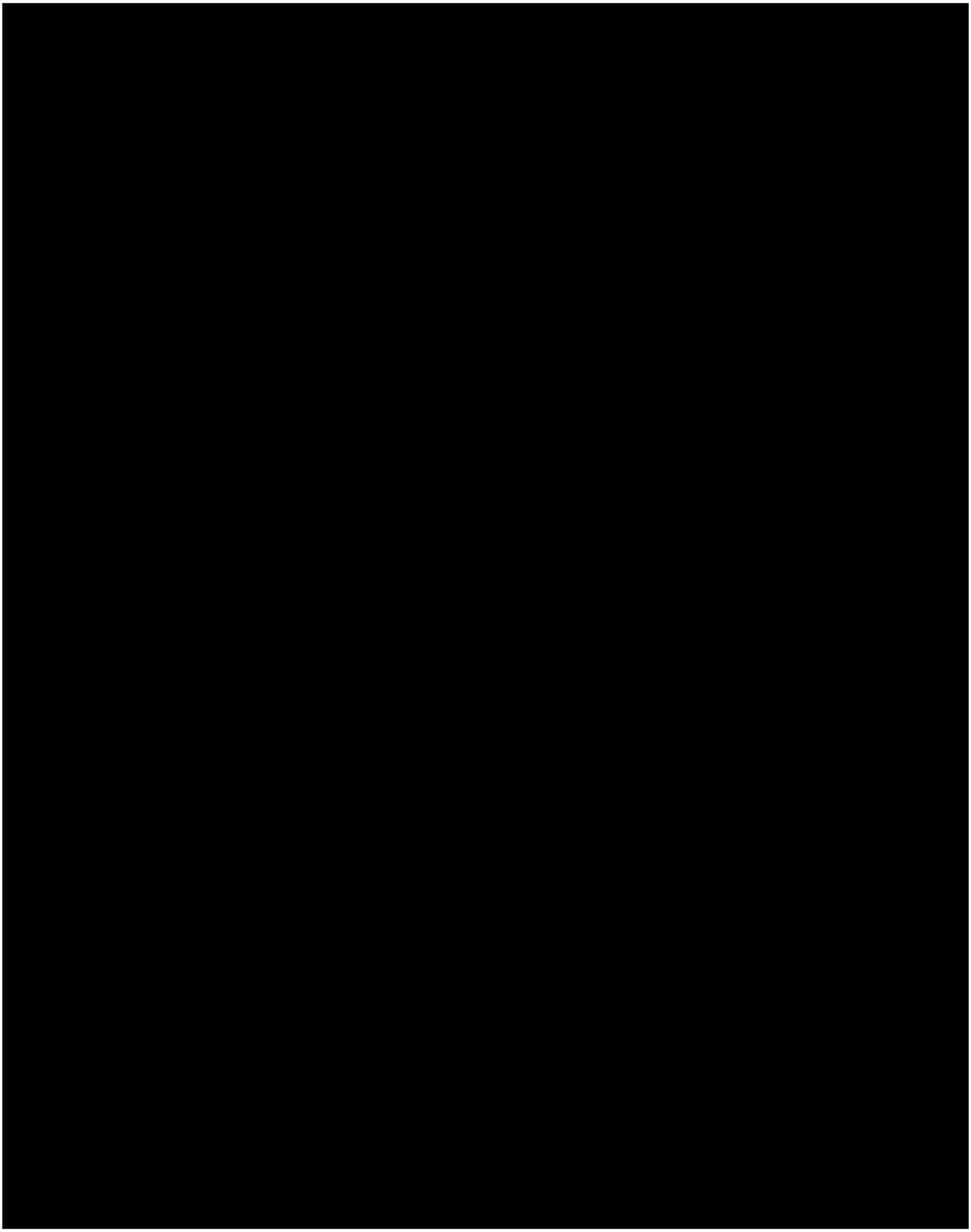
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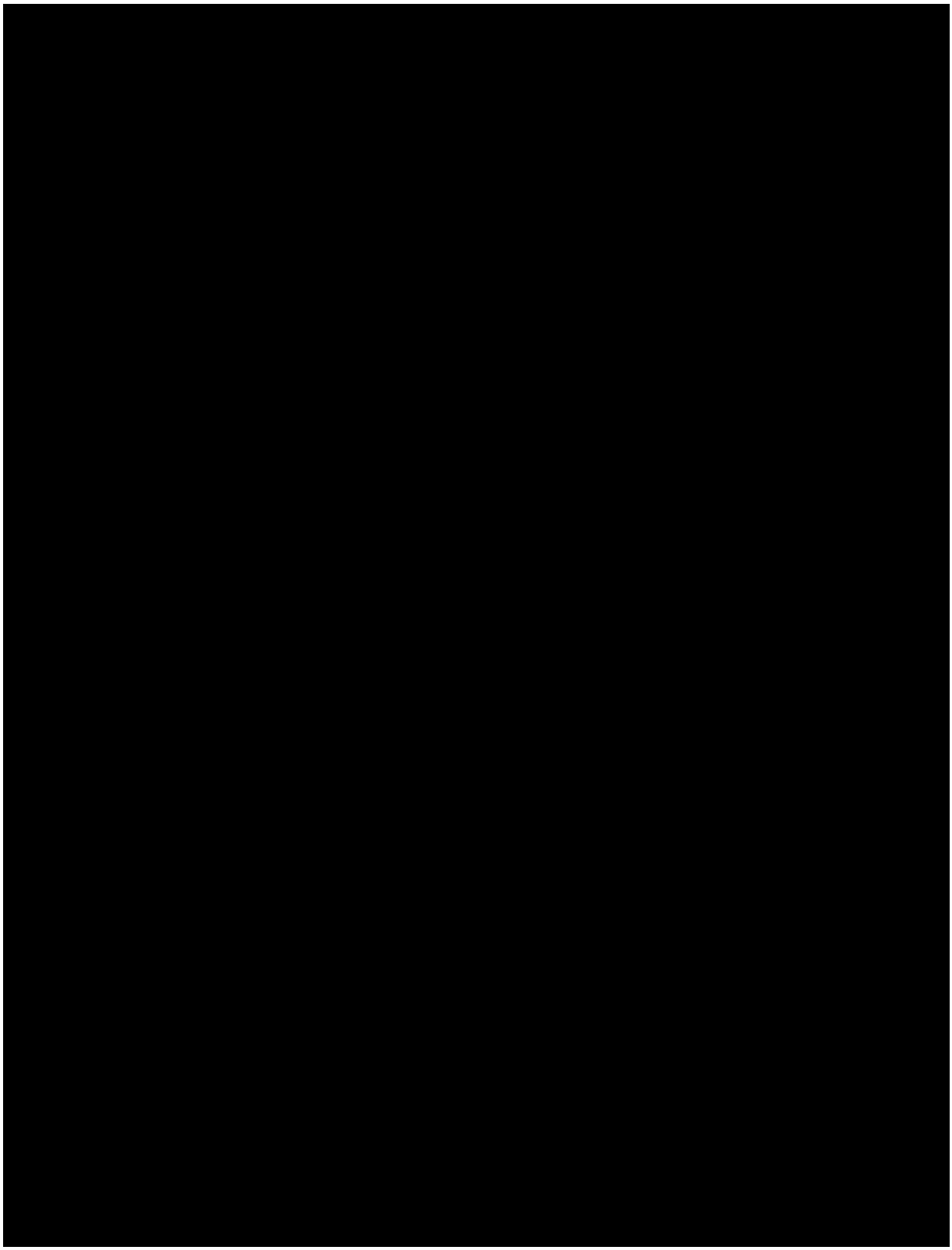
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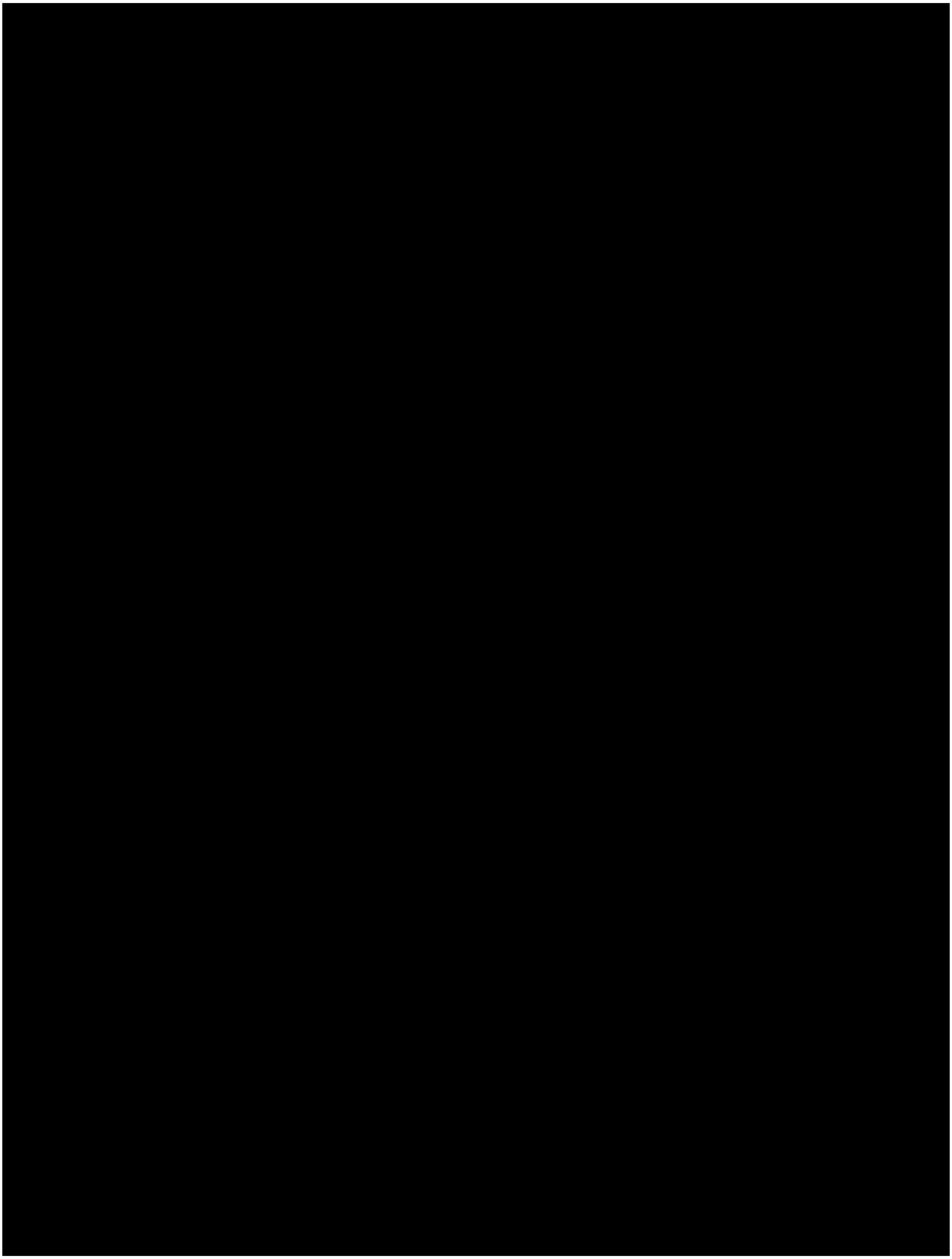
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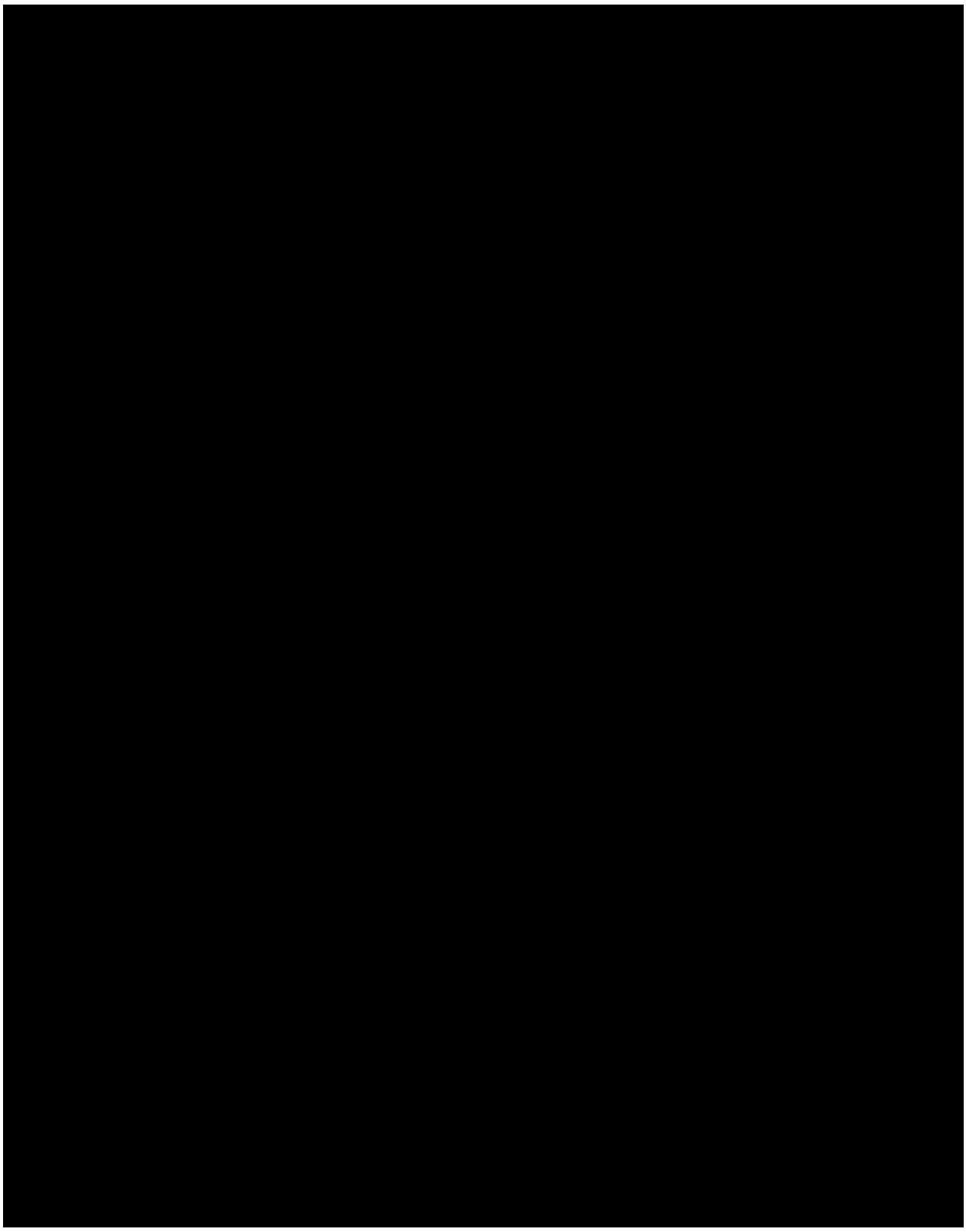
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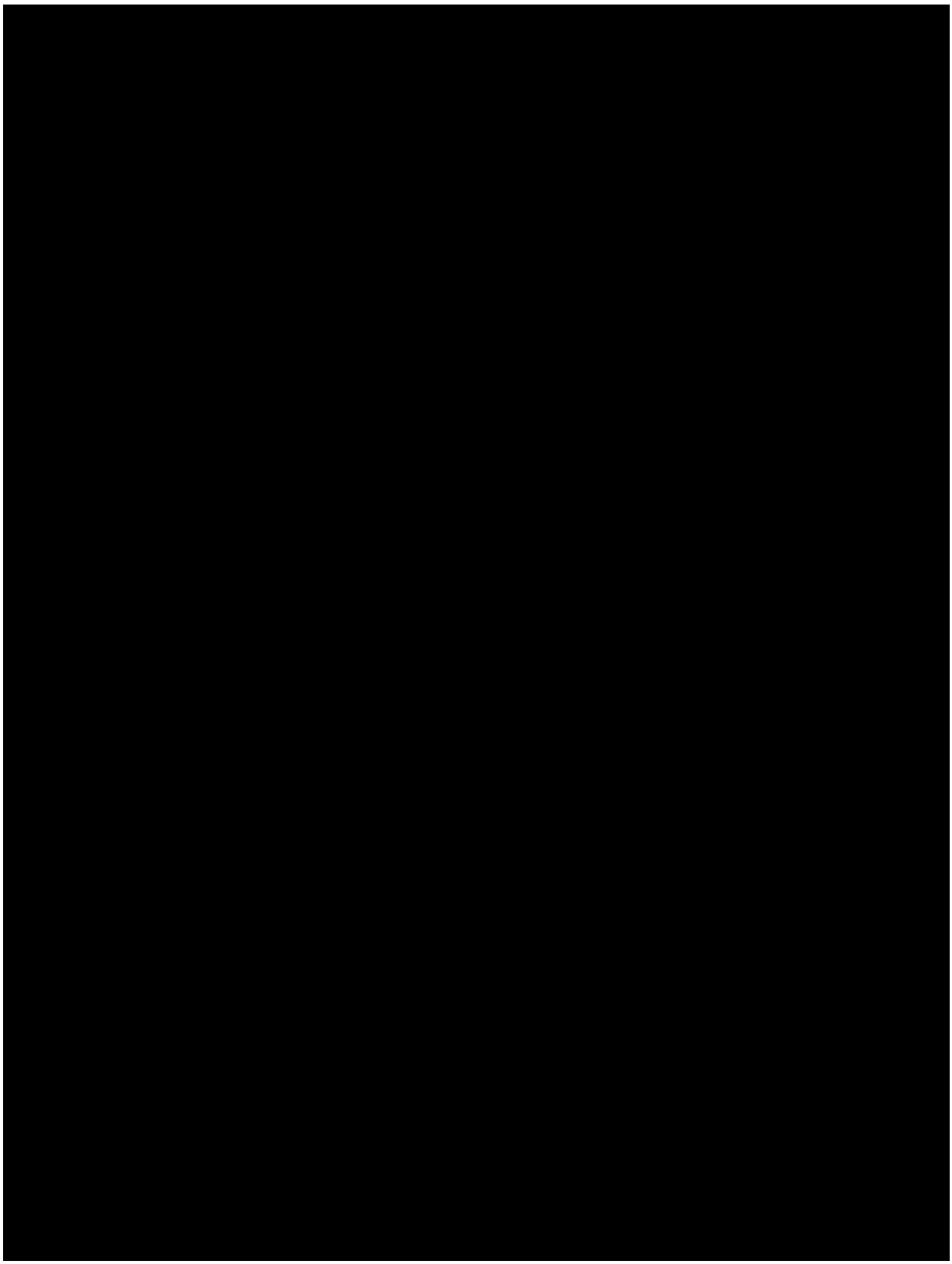
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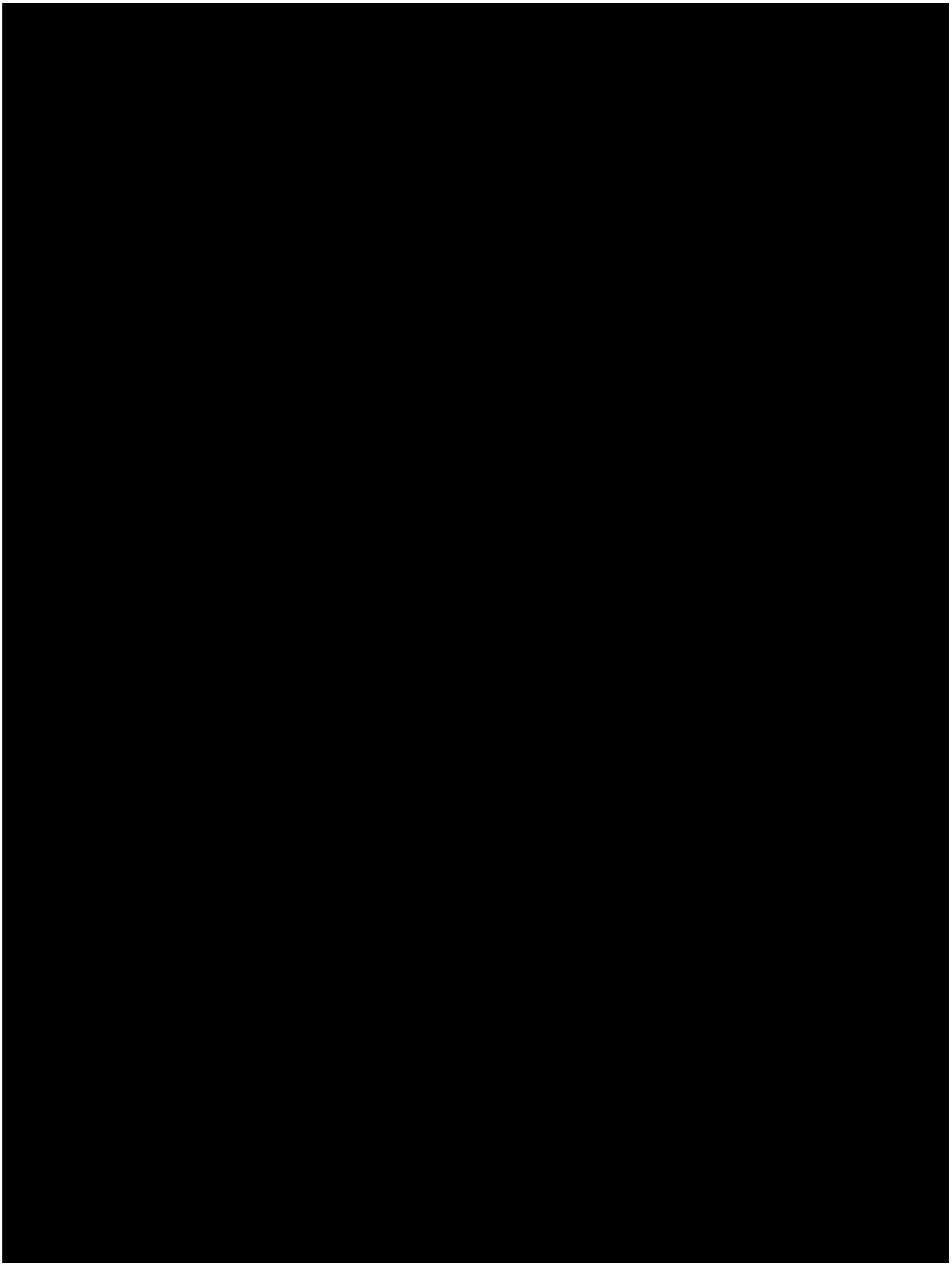
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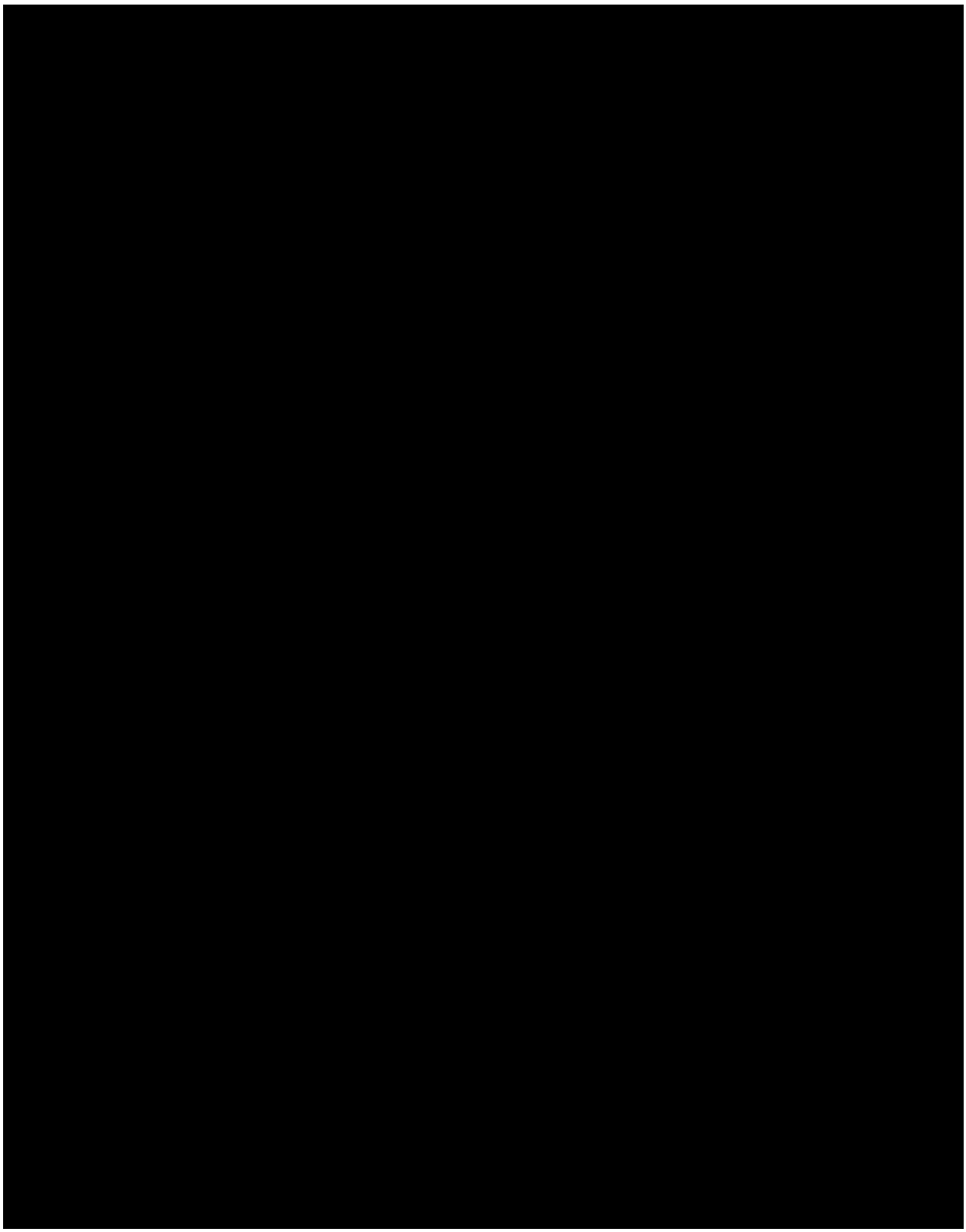
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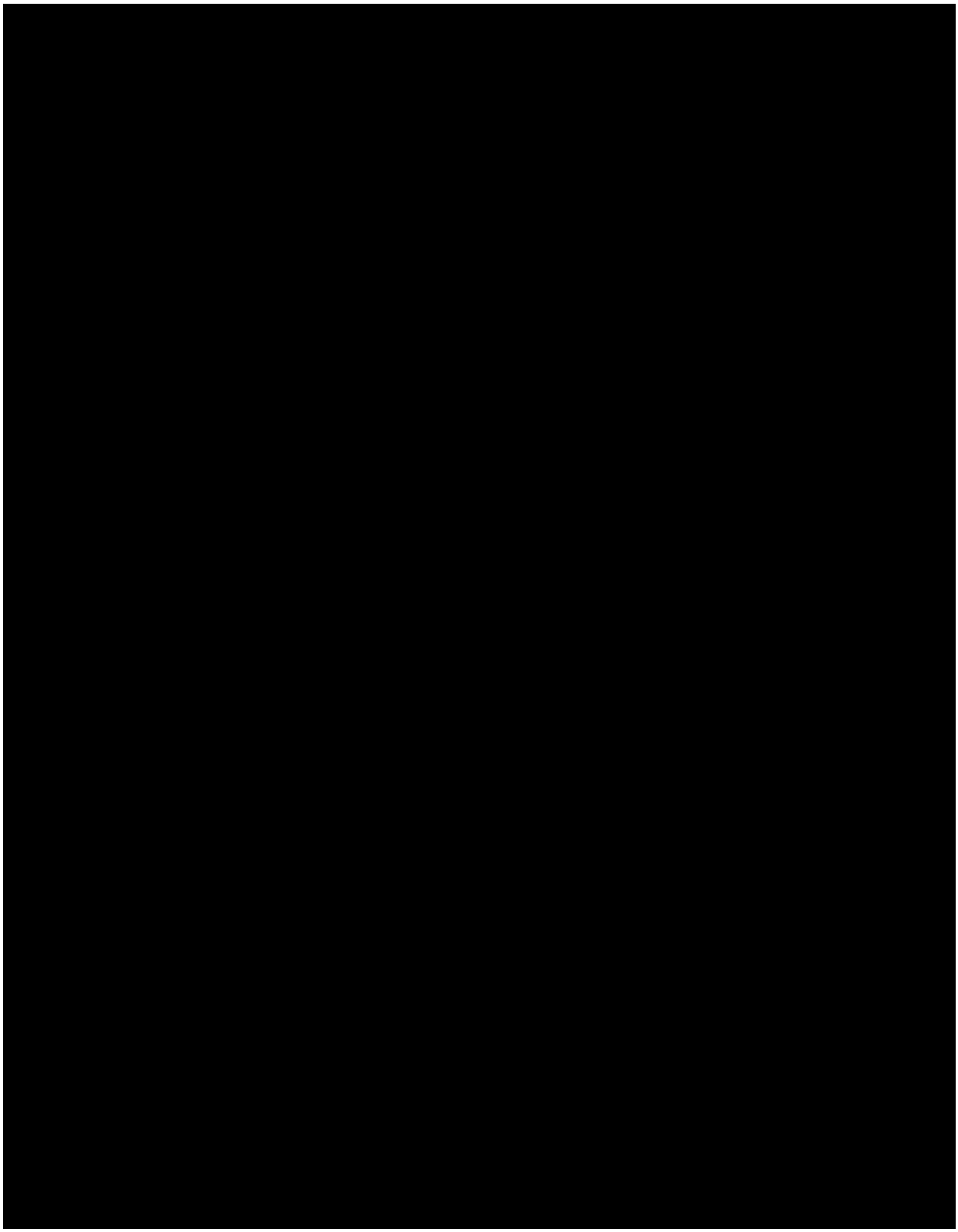
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O P E N S E S S I O N

THE WITNESS: Yeah, the -- this was shown at my deposition, and I believe it was one of the patents that we acquired at Motiv.

BY MR. POWELL:

Q. And you're familiar with both Figures 13 and 15 of this patent?

A. Are those the ones shown in the view right there or --

Q. We can -- I mean, you have a binder in front of you --

A. Oh sorry.

Q. -- but it's up on the screen.

A. Which binder is it on? Sorry.

Q. It's on the screen right now.

A. Okay.

Q. If that is easier for you. I think it probably is.

A. Yeah, I recognize this.

Q. And if you put 15B up there as well. Thank you, Mr. Merisier. All right.

In the embodiment of Figure 15A and 15B, would the circuit board and other components be within a space defined between the inner and outer housing?

A. Yes.

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Q. And could we put up Figure 13 back up on the screen, please. Thank you.

How is the housing configuration different between the embodiment of Figure 13 and the embodiment of Figure 15?

A. Figure 15 has two solid -- in this particular instance, I believe they were assumed to be metal. They could possibly be plastic as well. Figure 13 was -- the intent was to be a solid metal outer housing with an overmolded inner housing.

JUDGE JOHNSON HINES: What does "overmolded" mean?

THE WITNESS: Overmolding typically means having -- you have a structure that's inside a cavity. In this particular instance, you put the housing inside the tooling, and then there's a parting line. So as it pulse pulls apart where they meet in the middle, there's a parting line, and then the cavity that's produced inside the mold, you fill full with an epoxy. There's other times where you might use like a -- it could be an injection-molded overmolding, but in this incarnation, it was a two-part epoxy that gets injected into that cavity. That was the original patent that we had pursued.

BY MR. POWELL:

Q. I have a question about that, actually. We'll

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put this down for now.

I want to go to your direct exhibits, and it's CX-0989C and it's .0008. And it's up on the screen too.

A. Yeah, got it. Okay.

Q. And these are the drawings that you created? I think you testified to that.

A. Yeah. So this would be for a solid inner housing with an overmolded outer housing.

MR. VIDWAN: So, Your Honor, this is marked as a confidential document.

JUDGE JOHNSON HINES: Yeah, I understand it's marked confidential. What about this document is actually confidential?

MR. VIDWAN: Well, Your Honor, it's like the entire document. We want to make sure the entire exhibit does not come in because it's all together --

JUDGE JOHNSON HINES: All right. Are you going to be asking about this figure?

MR. POWELL: Yes, Your Honor.

JUDGE JOHNSON HINES: All right. Let's stay on the public record.

BY MR. VIDWAN:

Q. Okay. So this figure you yourself have only pointed as ring housing to one component in this figure in the lower left, right?

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A. Right. And then potting on the shaded area.
Q. Potting on the other side.
A. Right.
Q. And that potting on the other side is not identified by yourself as being a ring housing, right?
A. In this drawing, yes, but I think I'd also qualify this as -- this was very, very early in the company before we even knew how we were going to generate rings. So I was exploring a lot of different opportunities there, but yeah.
Q. And this is illustrating, I believe, Your Honor's question about the use of overmolding. Is that correct?
A. Yeah. And this is one way to do it. There could have been other ways. You could do it axially as well. This was one of many different ways you could do that overmolding.
Q. So I am not a person of ordinary skill in the art by any means in this field. So I understand, there's one metal space enclosure structure, that's the ring housing, and then the potting is overmolded within a mold to create the ring; is that correct?
A. Yeah. So on this particular case, the outer surface of the ring is generated by the inner surface of the mold cavity.
Q. The mold is the space-enclosing structure, not

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the ring itself?

A. I don't consider the mold part of the ring, though. That's just the manufacturing process.

Q. Okay. Thank you, sir.

And we can go to -- I believe it's a different exhibit, but it's CX-0988C. It's the other drawing, exhibit you testified to.

A. Yeah.

Q. And the page .0007. And I believe you testified to this on direct. And I just want to clarify something.

In the upper image, at the very top, that has the two -- the outer ring and the inner ring, between those two rings is what you would call a cavity, right?

A. Yes.

Q. And in order to make this particular ring, the components that you're putting in the ring need to be sized and shaped, configured, if you will, to fit within that cavity, correct?

A. No. We -- when we did the ring, we tried to have a single flex and make that work across as many SKUs as possible. There may have been -- at this point in time, I don't think we were thinking about curved cells. If there was a curved cell in this implementation, certainly it would probably have to have a different cell for a different size.

Q. That's fair. So let's say if you wanted to get

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-- you wanted to have a battery, a curved battery, that would fit within this cavity that's depicted on the top, that curved battery would have to have an appropriate size and shape to fit within that cavity, right?

A. Within reason. We -- when we were doing the last SKUs for Motiv, we tried to have a curved battery that had a small amount of movement to it that allows you to have a nominal size and then fit a larger size and a smaller size so you could fit three SKUs per battery.

Q. One of the important aspects of that process would be to know the dimensions of the cavity in order so you can get a battery that's of the appropriate size and shape, right?

A. Yeah. I mean, it's applicable for pretty much all rings.

Q. Okay. Let's go back to the other exhibit that you testified to today, which is CX- --sorry, you testified to three. Going back to the first exhibit, CX-0989C and page 0005.

The top says Mechio Battery Research?

A. Um-hum.

Q. That's the Mechio corporate emblem?

A. Yeah, I guess you could call it that.

Q. I don't know what to call it either.

A. Logo.

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Q. And then about halfway down the page, there's a listing of -- I believe it says thin film lithium, Asia-based battery suppliers. Is that right?

A. Yes. I don't know if that's actually accurate, though, because I don't think GMB was really thin film.

Q. Okay. GMB, what is GMB?

A. GMB was a company that Mike and I had visited when we went to -- I think they were in China -- one of our first trips when we were looking for CMs, contract manufacturers.

Q. And GMB is the maker of the GMBPower battery?

A. I'm sorry, say that one more time?

Q. GMB makes a battery or made a battery called GMBPower?

A. Sounds familiar, yes.

Q. The knowledge about how to make a curved battery is not something that Motiv came up with, right?

A. Curved batteries for rings or curved batteries in general?

Q. In general.

A. In general, that's correct, yes.

Q. The knowledge of how to make a small curved battery is not something that Motiv came up with?

A. I disagree with that.

Q. So you believe that the delta of what you

Patent Owner Oura Ex. 2024, 0080

invented is small?

A. I don't think it's small. If it was small, it would have been really easy just to throw NRE at a company and have them build it for us. GMB, for instance, we visited them. They had a factory in the middle of nowhere. No one was on-site. We left with a really shady feeling as if we were not super-confident in their ability.

We had conversations with them afterwards about what it would take for non-recurrent engineering, which it says in that line right there. Require NRE. And they were asking for a sizeable amount of money to develop the cell to where we needed it.

Generally, if a vendor is able to easily make something for you, the NREs are not astronomical. An NRE might be around $10,000, but when you start getting vendors asking for 100, 200,000 dollars, that kind of implies that it's not just a throw-together kind of thing.

Secondarily, every single company that we went to on our Asia trip had many reservations around the ability to make those cells smaller, and most of it was around the sealing width for the cell. Most of the equipment that these vendors were using were only able to do a 2-millimeter seal width. When you assemble the battery and you fold up the edges, when you're doing the bend, those 2-millimeter tabs have to go somewhere, and they usually bend it over the

Patent Owner Oura Ex. 2024, 0081

back side of the battery, and it makes the battery thicker.

Q. Okay. Thank you, Mr. von Badinski.

A. Sure.

Q. I have a couple more exhibits and then I'll finish up.

Can you go to RX-0289C.

A. Okay.

Q. And this is a document that was marked at your deposition. Do you recognize it?

A. Yeah. This I think came up in my deposition.

Q. That's your name at the top?

A. Yes.

Q. With the subject line "Ugh, more"?

A. Yeah. I'm really regretting "Ugh, more" by the way. If I knew it would get this much attention, I would have made it more attractive.

Q. And you sent this to Mike Strasser and Eric Strasser, two of the cofounders of Motiv?

A. That's correct, yeah.

Q. And you included two links. The second one is a Google Patents link to US 2012/0218184. Do you see that?

A. Yeah, if the link is to be decrypted that way, I would assume so. Yeah.

Q. And you sent this on June 17th, 2013?

A. Yeah. This is probably within a month of me

Patent Owner Oura Ex. 2024, 0082

meeting with Mike and Eric to figure out if we wanted to start the company.

Q. This is long before any of your patents issued?

A. Yes.

Q. You understood as an inventor you had a duty to find and disclose relevant prior art?

A. Yes.

Q. And you said on the last line, "This one may have some teeth."

A. Yeah. I think to that point, I'm not a patent attorney. I think at this point in time we were trying to find as many representative examples as things that we should present to an eventual IP counsel that were relevant.

And, like I said, this is most likely I found this and then immediately sent it versus going through. There's a lot of times where I find links and I think they're relevant, so I send them to everybody so everyone can view them. But I don't think it was like a substantial going through claim by claim, trying to figure out if it was something that would be eventually infringed upon.

Q. All right. Now, let's go to Exhibit CX-1141. You see the patent number -- not a patent number -- this is a publication number in the upper right-hand corner. It's U.S. 2012/0218184. Do you see that?

A. I do.

Patent Owner Oura Ex. 2024, 0083

Q. That's the same patent number that I read off for the Google Patents link?
A. Okay.
Q. This is the Wissmar patent?
A. Yes.
Q. Or Wissmar publication?
A. Yes.
Q. This is the document that you said may have some teeth, right?
A. Apparently, yes.
Q. All right. Thank you, Mr. von Badinski. I have no further questions at this time.
A. Okay.
JUDGE JOHNSON HINES: Who knew that we were going to get all the music today?
MR. WINSTON: I'm sorry, Your Honor. I --
JUDGE JOHNSON HINES: I said who knew that we were going to get all the music today?
(Laughter.)
THE WITNESS: It's not too late to go outside and enjoy it.
MR. WINSTON: May I proceed?
JUDGE JOHNSON HINES: Yes. Thank you.

EXAMINATION BY COUNSEL FOR ITC

BY MR. WINSTON:

Patent Owner Oura Ex. 2024, 0084

Q. Good afternoon, Mr. von Badinski.
A. Good job.
Q. My apologies.
A. It's all good.
Q. I just have a couple of questions for you.
We heard some -- and I'm not sure whether this needs to be on the confidential record, so if counsel or you believe that your answer may need to include confidential information, please let me know.
A. Okay.
Q. We had some talk about Motiv's presenting its product at -- the Motiv ring at a CES conference.
A. Yeah.
Q. Can you just tell a little bit about that?
A. So we announced the product in -- at CES. I believe it was January 2017. And there was a lot of PR that had to happen before that. So we met with a lot of different publications and embargoed them. So at CES, the embargo lifted, and everyone gets the reviews of the product that we were making.
Most of it was trying to get it out there in front of as many people as possible to get the interest in the product. It went very well. We had a lot of exciting -- a lot of excitement around it. I think the preorders started around that time as well, trying to get some initial

Patent Owner Oura Ex. 2024, 0085

excitement around it, initial orders in place, so that we knew we were on the right path.

One of the challenges with the ring is that it's not a single product. You're making seven of something, instead of one of something. So a ring company not knowing what the customer base looks like in terms of what the distribution of sizes looks like is really challenging.

We did a lot of preliminary checking for that, but the preorders allowed us to actually get real orders from people and then send out ring sizers and get real-world data as far as what the demographic looked like. I'm not sure if there is something else I can give you on that.

Q. No. I think that answers my question. So did the Motiv ring receive any awards?

A. Yeah. We got a best of show award for CES. It was a technology award. We got several others ongoing. I think we got a Red Dot Award, but in all honesty, I think that's just -- those are fairly easy to get, but, yeah, we were pretty proud about that.

Q. Okay. Thank you.

MR. WINSTON: I have no further questions.

THE WITNESS: Okay.

JUDGE JOHNSON HINES: All right. Any redirect?

MR. VIDWAN: No, Your Honor.

JUDGE JOHNSON HINES: All right. May we excuse

Patent Owner Oura Ex. 2024, 0086

the witness?

MR. VIDWAN: Yes, Your Honor.

JUDGE JOHNSON HINES: Yes.

THE WITNESS: Thank you.

JUDGE JOHNSON HINES: Thank you for your time.

THE WITNESS: Thank you.

(The witness stood down.)

JUDGE JOHNSON HINES: All right. Why don't we take our afternoon break and we'll reconvene at 3:40.

(A recess was taken at 3:23 p.m., after which the proceedings resumed at 3:43 p.m.)

JUDGE JOHNSON HINES: All right. Good afternoon.

MR. SCHULTZ: This is Christopher Schultz for Complainants.

JUDGE JOHNSON HINES: I assume you're going to call your next witness.

MR. SCHULTZ: We are. Complainants call Dr. Majid Sarrafzadeh.

JUDGE JOHNSON HINES: Would you raise your right hand, please.

Whereupon--

MAJID SARRAFZADEH,

having been first duly sworn/affirmed, was examined and testified as follows:

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THE WITNESS: I do.

JUDGE JOHNSON HINES: Thank you very much. Welcome.

THE WITNESS: Pleasure. Thank you.

DIRECT EXAMINATION

BY MR. SCHULTZ:

Q. Good afternoon, Doctor.

A. Good afternoon.

Q. Can you state your full name, please.

A. My name is Majid Sarrafzadeh.

Q. And where do you work? I'm sorry, where do you live, sir?

A. I live in Orange County, California.

Q. Why are you here today, Doctor?

A. I'm here to analyze a patent in this matter and look at two potentially infringing products and domestic industry products as well.

Q. So you're here to offer expert opinions, correct?

A. That's correct.

Q. And you have prepared some slides for us here today to assist in your testimony?

A. I did.

Q. That's CDX-003 and they are shown on the board here.

A. That's correct.

Patent Owner Oura Ex. 2024, 0088

Q. Doctor, could you describe your educational history for me, please.

A. I can. If you can go to the next slide, I have a Bachelor of Science, Master of Science, and a Ph.D., all from University of Illinois at Urbana-Champaign.

Q. And there are other schools listed here?

A. I have been a professor in electrical and computer engineering at Northwestern University until the year 2000. Then I moved to UCLA. Currently I'm a distinguished professor of computer science and also of electrical and computer engineering.

I have cofounded a couple of institutes at UCLA, one is UCLA Wireless Health Institute, and the other one is Brite Center on Minority Health Disparities. I am also Endowed Chair for Innovation at UCLA.

Q. Thank you, Doctor.

Are you published?

A. I have a few publications. I have about 600 peer-reviewed articles, many of these involve variable devices and systems. I also have authored four books, and I have approximately 30 patents and patent publications.

Q. And, Doctor, what about industry experience, do you have any?

A. I do. I have worked at Motorola and IBM. And I have cofounded three companies in the area of medical

Patent Owner Oura Ex. 2024, 0089

devices. One is MediSens. That works with adult diapers that have sensors in them. The other is Wanda Health. That does prediction of heart failure roughly five days before a congestive heart failure attack happens. And finally is Bruin Biometrics that works with sensors related to pressure ulcer, and bed ulcers.

Q. And, Doctor, have you received any honors or awards during your career?

A. Yes. I'm a fellow of the main institute of electrical engineering, which is called IEEE. I am a National Fellow of the National Academy of Inventors. Also Time Magazine in the year 2020 named one of my inventions as their -- as one of their medical device best product of the year. It is a so-called SEM scanner, which is used to predict pressure ulcer five days in advance.

If you recall, unfortunately Christopher Reeves passed away because of pressure ulcer, so we are trying to address that. This is the only electronic product in the market, and it is FDA approved.

Q. Doctor, I believe you used the term wearable devices already?

A. I have.

Q. And what does that mean?

A. Wearable devices are devices that are electronic in nature and you wear them, either as a helmet or around

Patent Owner Oura Ex. 2024, 0090

your wrist or around your foot, et cetera. And typically they are responsible for collecting physiological monitoring and motion of a human being.

Q. And, Doctor, do you have any experience specifically with wearable devices?

A. I have. Many of the work I've done, including many of my 600 publications, are related to wearable devices. We have built a WearSens necklace that received a national award from the National Science Foundation. It's a necklace you wear around your neck and it monitors the portion of food that one consumes. So it's all about portion control.

I have also built a platform technology. It's an insole inside a shoe which has many applications. The first version had four to eight pressure sensors. This was to detect pressure points for diabetes. If this is not done in a timely manner, it will result in an amputation of their toe.

The same device can be used to detect drunk walking and can also be used for kids, mostly autistic, who do toe-walking and through a vibration feedback in their shoes will try to correct that before it gets to surgery.

Q. And have you testified as an expert in any cases involving wearable devices?

A. Multiple. One was Immersion versus Meta, and I

Patent Owner Oura Ex. 2024, 0091

brown the inner circumferential surface and the internal housing component.

Q. What are we showing on slide 53 with respect to the Gen. 3 products?

A. Really the same thing. It is just a different view of the Gen. 3 product. I am pointing to the internal housing component, the potting material, and the inner circumferential surface of it.

Q. And what about on slide 54 and 55, what about Oura's Gen. 4 product? Does that practice this limitation?

A. It does, for a very similar reason. It has an internal housing component and also an inner circumferential surface. We see that on the slide 55, where I have pointed to both components and surfaces.

Q. And, again, you're showing -- these exhibits are -- well, let me ask you.

What are these exhibits that you're displaying?

A. All right. These are actual pictures of Gen. 4 Oura product. The left one, CX-699C, is laying that flat on a surface. And 667 is the ring standing up. So just two different views of Gen. 4 ring.

Q. Okay, Doctor. And could you explain your summary slide here on slide 56?

A. Following the practice that I have followed so far, I have put a green checkmark where the limitations are

Patent Owner Oura Ex. 2024, 0092

CERTIFICATE OF REPORTER

TITLE: Certain Smart Wearable Devices

INVESTIGATION NO: 337-TA-1398

HEARING DATE: December 11, 2024

LOCATION: Courtroom A

NATURE OF HEARING: Evidentiary Hearing

I hereby certify that the foregoing/attached transcript is a true, correct and complete record of the above-referenced proceedings of the U.S. International Trade Commission.

Date: December 11, 2024

SIGNED: _____

Signature of the Contractor of the
Authorized Contractor's Representative
1220 L Street, N.W., Suite 206
Washington, D.C. 20005

I hereby certify that I am not the Court Reporter and that I have proofread the above-referenced transcript of the proceedings of the U.S. International Trade Commission, against the aforementioned Court Reporter's notes and recordings, for accuracy in transcription in the spelling, hyphenation, punctuation and speaker identification and did not make any changes of a substantive nature. The foregoing/attached transcript is a true, correct and complete transcription of the proceedings.

SIGNED: _____

Signature of Proofreader

I hereby certify that I reported the above-referenced proceedings of the U.S. International Trade Commission and caused to be prepared from my tapes and notes of the proceedings a true, correct and complete verbatim recording of the proceedings.

SIGNED: _____

Signature of the Court Reporter

Patent Owner Oura Ex. 2024, 0093

UNITED STATES
INTERNATIONAL TRADE COMMISSION

In the Matter of:	)	Investigation No.
CERTAIN SMART WEARABLE DEVICES,	)	337-TA-1398
SYSTEMS, AND COMPONENTS THEREOF	)	

OPEN SESSIONS

Pages: 612 through 882 (with excerpts)

Place: Washington, D.C.

Date: December 13, 2024

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MR. MOEHRINGER: Good morning, Your Honor.

JUDGE JOHNSON HINES: Good morning.

MR. MOEHRINGER: Ultrahuman calls as its next witness Mohit Kumar.

JUDGE JOHNSON HINES: Good morning. Could you raise your right hand. Would you raise your right hand? Whereupon--

MOHIT KUMAR,

having been first duly sworn/affirmed, was examined and testified as follows:

THE WITNESS: Yes, I do, Your Honor.

JUDGE JOHNSON HINES: Thank you. Please be seated and welcome.

DIRECT EXAMINATION

BY MR. MOEHRINGER:

Q. Good morning, Mr. Kumar. Can you please state your name for the record?

A. Good morning. My name is Mohit Kumar.

Q. What is your current occupation?

A. I'm the founder and CEO of Ultrahuman.

Q. What are your current responsibilities?

A. I overlook day-to-day operations, fundraise, design, along with my team.

Q. Where do you currently live?

A. I live in Abu Dhabi, UAE, United Arab Emirates.

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CROSS-EXAMINATION

BY MR. ANDERSON:

Q. Nice to meet you, Mr. Kumar. I'm Tan Anderson, representing the Complainants, Oura Ring. How are you today?

A. I'm good. Good to see you.

Q. Did you get some good sleep last night?

A. 85 sleep score.

Q. 85 sleep score?

A. Yeah.

Q. Is that a good one?

A. It's a really good one, yeah.

Q. Okay. Excellent.

I'd like to pull up Respondents' Demonstrative Exhibit 4C, slide 6. And if Mr. -- perfect. Thank you.

You reviewed this during your direct examination, correct?

A. Correct.

Q. And according to this, you founded Ultrahuman in late 2019, correct?

A. That's correct, yes.

Q. And then according to this, in 2020, you had the idea of integrating these health markers like sleep, heart rate, and metabolism into a small device; is that right?

A. No. Actually, it was a collection of biomarkers

Patent Owner Oura Ex. 2024, 0096

from different devices, integrated into one software and one data platform.

Q. So you didn't have the idea of putting it into a ring in mid-2020, did you?

A. We basically thought that we will put everything onto the ring and whatever is possible in one form factor. Like, naturally, right, because why would we need multiple form factors if you just can put everything into one. But that was not the core constraint that we were living with.

We said that let's get all the data first and then we can integrate everything back. Like, for example, we evaluated what's called an AFib patch in the early days of the evolution of Ultrahuman, but then we decided that we'll just integrate it back in the ring itself because the ring by itself is so powerful.

Q. Okay. I'm a little confused. Let me just state the question again. It's a really simple one. I'm not asking for an explanation.

In 2020, did you have the idea of putting this technology into a ring form factor, yes or no?

A. In 2020, yes, we had this idea.

Q. Okay. And you claim that this idea was your idea, Ultrahuman's idea, correct?

A. This is our idea, yes.

Q. But back in 2020, you knew that the Oura Gen. 2

Patent Owner Oura Ex. 2024, 0097

ring was on the market, didn't you?

A. Yes. I did know, yes.

Q. And you knew that the Oura Gen. 2 ring tracked health markers, didn't you?

A. It tracked sleep, precisely.

Q. Sleep and other health markers like heart rate, correct?

A. Yeah, but I used it majorly for sleep.

Q. Okay. You used it mainly for sleep. That wasn't the question I asked. I asked, did you know that the Oura 2, the Oura Gen. 2 ring, tracked health markers like sleep and heart rate, correct? Right?

A. Yes.

Q. And you knew that back in 2020, correct?

A. Absolutely.

Q. In fact, you purchased and you owned an Oura Gen. 2 ring back in 2018, correct?

A. Yeah. I backed, like, I think Oura Ring on Kickstarter as well and basically bought, like, many such -- 35 plus devices.

Q. I'm sorry. That wasn't the question I asked. I asked, did you purchase and own an Oura Gen. 2 ring around 2018?

A. Yeah, yeah.

Q. Okay. And then you then answered that you

Patent Owner Oura Ex. 2024, 0098

actually bought an about 25 of them, or were you talking about other devices?

A. Like other such devices like there was Whoop in the market and there was like a bunch of Apple watches. Like I have like a lot of devices that I test and try, yeah.

Q. Okay. Understood. I didn't ask about other devices. I'm trying to ask really precise questions. I know you're trying to answer truthfully. So just listen to the question and then answer just what I'm asking. Okay?

A. Sure.

Q. Thank you.

You were an early adopter of Oura; you actually had an Oura Gen. 1 ring, correct?

A. Gen. 2.

Q. You also had an Oura Gen. 1 ring before that, didn't you?

A. Yeah, I think I did. Yeah. I think very early days maybe, yeah.

Q. So very early days, early adopter, you actually bought and owned an Oura Gen. 1 ring, correct?

A. Yeah.

Q. So you knew about the Oura Ring when Ultrahuman started designing its own ring, correct?

A. Absolutely.

Q. Despite that, you have claimed that you did not

Patent Owner Oura Ex. 2024, 0099

buy or tear down an Oura Ring to figure out how to make a competing ring; is that true?

A. Yeah, that's correct.

Q. You did know that Oura had patents when Ultrahuman started designing its first products in 2020 and 2021, correct?

A. I think I got to know about the patents when we were sued, not before. When we were sent the lawsuit, yeah.

Q. Okay. Let's pull up your transcript, page 46, lines 16 through 22. You remember you testified in a deposition in this case?

A. Yeah.

Q. And do you remember being asked: "Do you know about Oura patents?"

And then you said: "I think when we started designing is the time you're asking about."

And the question was: "Yes."

A. Yeah.

Q. And then your answer was: "I think we might have a general idea that Oura has patents, not, like, what kind of patents, but Oura has some patents. We didn't know which one of these."

Do you remember testifying about that?

A. I still stick by that, which is basically the understanding that I have today as well, which is basically

Patent Owner Oura Ex. 2024, 0100

we knew that Oura would have some patents, but we did not know -- I did not have a general idea of which one of these it would be, until we got sued, yeah.

Q. And my original question before we had to pull this up was you knew that Oura had patents back when Ultrahuman started designing its first product in 2020 and 2021, correct?

A. Yes.

Q. Okay. Your legal teams analyzed some of the patents that were available -- that were publicly available prior to releasing Ultrahuman's first product, the R1, back in 2021, true?

A. Yeah.

Q. Okay.

A. That's correct, yeah.

Q. Let's go back to 2020. Let's pull up RDX-4, slide 6, again, please.

So back in 2020, you said on direct that you visited a company called Lazy Co., and they were testing a ring called AINA, A-I-N-A, that worked with your TV, your coffee machine, and your car; is that right?

A. Correct.

Q. That AINA Ring doesn't have any components inside the band that goes around your finger, true?

A. It has components like accelerometer inside the

Patent Owner Oura Ex. 2024, 0101

band.

Q. I didn't understand what you said.

A. It had a component called accelerometer, which was inside the band.

Q. Most of the components were outside the band, right?

A. That's correct, yeah.

Q. It looked like a big Superbowl jewelry-type ring with almost all of the components outside of the band, correct?

A. I would say 50/50, 50 percent were outside, 50 percent were inside. It wasn't like a super-big ring like the Gen. 1 ring of Oura, no. Not as bulky as that.

Q. You're saying it was not super-big?

A. It was not super-big, yeah.

Q. Okay. Let's pull up CX-945, please.

A. It was bigger than what we have right now, but yeah.

Q. Let's take a look at the next page. I think there might be some pictures of the bigger portion of this ring. Let's zoom in here to the top left and look at the picture here.

Do you see the skinny band on this ring?

A. Yes.

Q. Do you see the almost knuckle-to-knuckle spanning

Patent Owner Oura Ex. 2024, 0102

jewelry part where the components are?

A. Yes.

Q. Do you still want to stick with your testimony that 50/50 of the components are on the band and in the big jewelry part?

A. Yeah, yeah, yeah, because what you're not seeing is basically, on the metallic part, there were sensors like an accelerometer. I think that the reason why you're putting a lot of weight next to the external part is because of the screen. It had a screen, right, so screen naturally, obviously will have -- a little bit larger, but overall the AINA Ring had way less components.

Let me just clarify that. It only had accelerometer. It only had a Bluetooth module. So it was very easy to actually fit everything within the thin part as well as the screen part. The screen part actually obviously was taking a lot of external space, that was 50/50.

Q. This ring didn't have any physical sensing parameters that measured your heart rate or your blood oxygen level or anything like that, correct?

A. Only accelerometer, nothing else.

Q. Only an accelerometer, correct?

A. Yeah.

Q. And an accelerometer just measures movement, correct?

Patent Owner Oura Ex. 2024, 0103

A. That's correct, yeah.
Q. So you started working -- let's go back to the timeline, RDX-4, slide 6. You started working with Lazy Company, you got this AINA Ring, you cracked it open, and you stripped off some of the components, correct?
A. AINA Ring, yes.
Q. And this review of the AINA Ring, this analysis, lasted through 2021, stripping off components, figuring out what you could add in, and so forth, correct?
A. Yeah. In between 2021 and 2022, yeah.
Q. Okay. You remember that Oura announced its Gen. 3 ring in October of 2021, correct?
A. That's correct.
Q. And Ultrahuman, according to this timeline, made its first prototype at the exact same time in October of 2021? Do you see that?
A. Yes, this was an internal prototype of the R1. We didn't actually release the product to general consumers, but we looked at first batch of M1 users to release it.
Q. I'm not asking what you looked at. I'm not asking about other things that you did. I'm just asking to confirm whether the date that Ultrahuman made its first prototype --
A. Yeah.
Q. -- was October 2021, the exact same time that

Patent Owner Oura Ex. 2024, 0104

Oura released its Gen. 3 ring. Is that true or is that false?

A. Yeah, that's true. October 2021 is true.

Q. Okay. And during your development process, Ultrahuman might have reverse-engineered other wearable products. True?

A. What do you mean by reverse engineering?

Q. This is from your deposition testimony. I'm asking no surprise question here.

Do you remember that during your deposition, you testified that during the Ultrahuman ring development process, you might have reverse-engineered other wearable devices?

A. We did a comparative analysis. We looked at a lot of watches. We opened up a lot of watches, yes. That's what we did.

Q. Okay.

A. Yeah.

Q. And Ultrahuman also bought an Oura Ring for comparison?

A. That's correct.

Q. How many?

A. I think I know about one which was analyzed.

Q. You only know about one Oura Ring that was purchased for analysis?

Patent Owner Oura Ex. 2024, 0105

A. I think a few might have been purchased, but I don't remember exactly how many, but then I know about the one that was analyzed.

Q. Okay. A few. Five to ten? 20 to 30?

A. Maybe five to ten. I don't know. Somewhere in that range. But maybe like just one as well. I -- I don't really know the number, but I know about the one that was analyzed. That's what I'm saying.

Q. So your testimony is you might have bought five to ten rings but only one was used for analysis?

A. Yeah. So I'm not sure what the number exactly, that's why I'm just saying that it could be any number, but I know a lot more about the one that was analyzed.

Q. And were you responsible for purchasing the Oura Rings that were bought by Ultrahuman?

A. Not directly. Some of our team members actually.

Q. And you're saying that despite buying five to ten, you only analyzed one of them?

A. Yeah. That's what I'm aware of. Actually, I was aware of that one ring that was analyzed.

Q. And during this analysis, Ultrahuman actually took an Oura Ring apart, correct?

A. Yeah. We looked at what's inside the Oura Ring.

Q. Okay. And Ultrahuman might have done that before Ultrahuman shipped its own ring product in July of 2022,

Patent Owner Oura Ex. 2024, 0106

correct?

A. We shipped an early prototype before that because that's what October 2021 time line is for, which is basically we ship it to an early set of M1 users.

Q. Okay. I'm just trying to get a sense of when Ultrahuman was analyzing the Oura Ring. And my understanding is that that happened before Ultrahuman shipped its first commercial ring product. Is that correct?

A. Yeah, first publicly available, I think internal beta would be before we actually -- internal beta happened first, then analysis happened, and then public release of the ring happened. That's correct.

Q. And when in that order was Ultrahuman analyzing and tearing apart the Oura Ring?

A. In the middle, which is what I said, right? Analyzing the Oura Ring happened maybe around like November or December of 2021. So October is when we did the early prototype. And then I think June or July is when we released the public version of M1, next year.

Q. Okay. So which month and year was the analysis happening of the Oura Ring?

A. November 2021 -- November, December 2021, somewhere around that range.

Q. November, December of 2021?

A. Yes.

Patent Owner Oura Ex. 2024, 0107

Q. The analysis of the Oura Ring was done by multiple teams at Ultrahuman, correct?

A. I think majorly the research team, we call it the R&D team, they would have done it.

Q. Isn't it true that the form and production team also analyzed the Oura Ring?

A. The R&D team and the production team actually are colocated, so they would have been potentially looking at the same ring, yeah.

Q. Okay. And isn't it true that the software team also analyzed the Oura Ring in that November/December 2021 time frame?

A. Software? I don't remember that there was any segregation between hardware/software and R&D in terms of -- I think the R&D team did the analysis, and they shared a bunch of insights with us.

Q. So because there was no segregation, the software team also participated; is that correct?

A. Just like me, for example, I looked at what was analyzed and what was the outcome. Everybody in the company would have actually looked at the outcome.

Q. So everybody in the company looked at and was involved in the teardown and analysis of the Oura Ring?

A. It was a comparative analysis. I think teardown would be -- I don't know what you mean by that, so if you

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can explain what you mean by that, then I can --

Q. Yes. What I mean by "teardown" is physically taking the Oura Ring apart, which I believe you testified three questions ago happened at Ultrahuman, correct?

A. Comparative analysis, yes.

Q. I'm talking about teardown. So we're talking the same language, you opened apart the Oura Ring around November or December of 2021, correct?

A. Yeah. We looked at two things, which is the data from this and also I Fix It. I Fix It is the YouTube channel, which already has the teardown of the Oura Ring.

Q. Okay. So you were looking at the Internet to see other teardowns of the Oura Ring?

A. Of every available out there, but also the Oura Ring.

Q. Okay. And that was on a website called I Fix It?

A. Yeah. It's a YouTube channel.

Q. Okay. So you were looking for publicly-available versions of the Oura Ring teardown, but then you also bought at least one ring for tearing down and did that --

A. Yeah.

Q. -- at your facility in India, correct?

A. Correct.

Q. And, lastly, you said everyone did it, but I want to make sure that you also testified that the hardware team

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at Ultrahuman analyzed the Oura Ring, correct?

A. The R&D team.

Q. I didn't ask about R&D. I just want to ask specifically about the hardware team. They were involved in the teardown of the Oura Ring product, correct?

A. Maybe hardware would mean R&D and production and everyone else as well, so I think that's why I specified it's R&D.

Q. Okay. So hardware was part of that?

A. Yeah. Hardware was the overarching structure, basically.

Q. And, therefore, it was part of it, correct?

A. R&D will be a part of hardware.

Q. Say that again?

A. R&D will be a part of hardware, not the other way around.

Q. Okay. So hardware was involved, correct?

A. Yeah. Yeah, yeah, yeah.

Q. Okay. And firmware was involved as well, correct?

A. It was -- if you mean involvement as looking at the analysis, which was done, then everybody in the company was involved because we looked at multiple variables, including the Oura Ring, and looked at what are the good things and the bad things and -- yeah, if that is the -- if

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that is your understanding, then yes, everybody would have been involved.

Q. Okay. And part of the purpose of tearing down Oura's ring was to learn how it was sort of basically made and how big Oura's battery was, correct?

A. I think, just like any other competitive analysis, what we were trying to do was what are the good things, what are the bad things. We were trying to actually map it back to online reviews that we saw, that -- one question that I had was why is it so bulky?

And another thing was basically, yeah, structurally, like, what is the Oura Ring made of. Like just -- like generally you're asking questions, like -- just like, for example, it would happen in any other industry.

Q. So you wanted to figure out what the Oura Ring was made of, that's what you said, right? And you also wanted to figure out how large of a battery Oura used, correct?

A. Not specifically on the battery front, I would say, because we looked at the Oura Ring, there was a battery for sure, but there was a metallic shell as well. I think the core insight that I remember we were addressing was that it has two symmetric Rx coils attached to the PCB. That was the major insight.

Q. Okay. So it's your testimony that you did not

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want to figure out how large the Oura battery was?

A. I think we would have figured out everything because -- which is like how large the battery is, what is the Rx coil, how does the PCB look? But that would be like the overview of how devices are made.

Like, for example, if you open up a phone, you will find this is the Bluetooth sensor, this is the PCB, sort of like general analysis. I think what we also noticed was that everything was unlabeled, so it was very hard to figure out what is exactly inside.

Q. You wished they had labeled everything for you?

A. Everybody in this world who is building a hardware company would wish that.

Q. Say that again?

A. Everybody in this world who builds a hardware company would wish that every other company labels their components.

Q. That would have made it easier for you, right?

A. For everyone else, including Steve Jobs.

Q. Your team also noticed that Oura's printed circuit board was flexible, correct?

A. Yeah.

Q. And that Oura has symmetric Rx wireless charging coils, correct?

A. Yes.

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Q. And that Oura's outer shell was coated metal, correct?

A. Yes.

Q. And talking about labeling, your team tried to figure out what chipsets were used in Oura's ring, but you couldn't figure it out because, like you said, they weren't labeled, right?

A. Yeah.

Q. Your team also tried to figure out what sensors were in the Oura Ring, correct?

A. That was quite obvious. I mean, electronics and computer science engineers, so it's pretty obvious.

Q. So that was an easy one to figure out?

A. You don't even need to open it up. It's just, like, visible from the outside.

Q. Let's talk about your manufacturing. And I want to focus on the period of late August 2024, when we took your deposition. Is that okay?

A. Okay.

Q. So I want to be crystal clear with you, sir, I want to talk only about the state of manufacturing for Ultrahuman back when we took your deposition in August of 2024. I don't want you and I'm not asking you about the current state of manufacturing and what might have happened between August and now. Do you understand that?

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CERTIFICATE OF REPORTER

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INVESTIGATION NO: 337-TA-1398

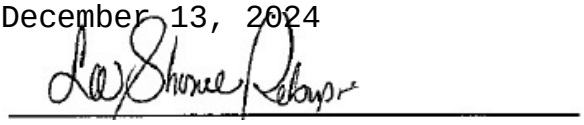
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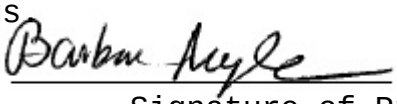
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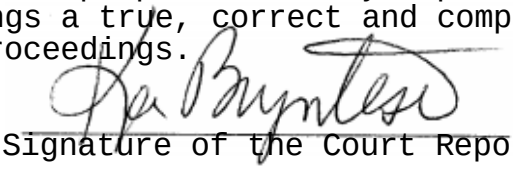
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