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#### IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF OHIO EASTERN DIVISION

# ELECTRONIC SCRIPTING PRODUCTS, INC.,

Plaintiff,

Civil Action No.: 1:24-cv-02026

TRIAL BY JURY DEMANDED

v.

A.W. FABER-CASTELL USA, INC.,

Defendant.

# **COMPLAINT FOR PATENT INFRINGEMENT**

COMES now Plaintiff ELECTRONIC SCRIPTING PRODUCTS, INC. ("ESPi") and for its Complaint against Defendant A.W. FABER-CASTELL USA, INC. ("Faber-Castell"), alleges as follows:

# THE PARTIES

1. Plaintiff Electronic Scripting Products, Inc. ("ESPi") is a company organized under the laws of the State of Delaware, having its principal place of business located at 446 Old County Road, Suite 201, Pacifica, CA 94044 and mailing address at 555 Bryant Street #142, Palo Alto, CA 95301.

2. On information and belief, Faber-Castell is a Delaware corporation with its principal place of business at 9000 Rio Nero Drive, Cleveland, OH 44131.On information and belief, Faber-Castell may be served with process c/o The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, DE 19801.

#### JURISDICTION AND VENUE

3. This is an action for patent infringement in violation of the Patent Act of the United States, 35 U.S.C. §§ 1 *et seq*.

4. This Court has original and exclusive subject matter jurisdiction over the patent infringement claims for relief under 28 U.S.C. §§ 1331 and 1338(a).

5. This Court has personal jurisdiction over Faber-Castell because it maintains a regular and established place of business in this District. On information and belief, Faber-Castell has transacted and is continuing to transact business in this District that includes, but is not limited to, committing acts of patent infringement giving rise to this action by use and sale of products and systems that practice the subject matter claimed in the patent involved in this action.

6. Venue is proper in this district under 1400(b) because Faber-Castell has a regular and established place of business in this District and has committed acts of infringement here.

### **FACTS**

7. On January 29, 2019, United States Patent No. 10,191,559 B2 entitled "Computer Interface For Manipulated Objects With An Absolute Pose Detection Component" was duly and legally issued. A true and correct copy of United States Patent No. 10,191,559 B2 ("the '559 Patent") is attached hereto as Exhibit A and incorporated herein by this reference.

8. Plaintiff is the assignee of the entire right, title and interest in and to the '559 Patent, including all rights to enforce the '559 Patent and to recover for infringement.

9. Claim 1 of the '559 Patent claims:

1. A manipulated object cooperating with a first plurality of high optical contrast features disposed in a real three-dimensional environment, said manipulated object comprising:

a) a photodetector configured to detect said first plurality of high optical contrast features and generate photodetector data representative of the positions of said first plurality of high optical contrast features;

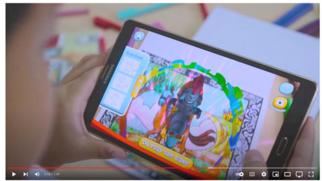
b) a controller configured to identify a derivative pattern of said first plurality of high optical contrast features from said photodetector data, wherein said derivative pattern is indicative of the position of said photodetector; and

c) at least one component selected from the group consisting of an auxiliary motion detection component, an active illumination component and a scanning component.

10. On information and belief, Faber-Castell infringes Claim 1 of the '559 Patent by making, using, selling and/or offering to sell products in the United States, including in this District, that incorporate or use augmented or virtual reality, such as applications "Colour to Life," "Never Ending Forest," and "ARt Alive" ("Accused Products").

11. Faber-Castell infringes each element of Claim 1 as follows:

"A manipulated object cooperating with a first plurality of high optical contrast features disposed in a real three-dimensional environment, said manipulated object comprising:" – To the extent that the preamble is included in an infringement analysis, below demonstrates the various elements – Faber-Castell uses as manipulated object a mobile device such as an iOS device or an Android device.



Faber-Castell "Colour to Life" | Augmented Reality Coloring | AR&Co.



The device cooperates with high contrast features in the real three-dimensional environment,

e.g., the augmented reality set such as Colour to Life with their markings including QR codes:



#### **Product details**

- 15 page colouring book includes 5 designs in various poses to create 5 unique 3D characters
- Ready-to-go set includes everything needed for instant creative fun
  Augmented reality games & activities foster imaginative play and exploration
- Brilliant, vibrant colours promote maximum creative inspiration
- 1.5mm bullet-shaped durable felt-nibs create consistent, precise lines
- Connectable caps keep pens organised and inspire play and building
- Water-based ink from food dyes is non-toxic and safe for kids
- Washes out of most fabrics for peace of mind and easy clean-up
   Breathable non-choke caps ensure worry-free playtime
- Long-lasting ink means fewer pen replacements
- Colour to Life augmented reality set

Connector markers paint bright and strong and even have an extra playful benefit: connecting the caps provides many possibilities for games, crafts, and cleanup.



"a) a photodector configured to detect said first plurality of high optical contrast features and generate photodetector data representative of the positions of said first plurality of high optical contrast features;" – Faber-Castell uses a camera of an iOS device or Android device as the photodector to detect the high optical contrast features and generate data representative of the positions of these features:



"b) a controller configured to identify a derivative pattern of said first plurality of high optical contrast features from said photodetector data, wherein said derivative pattern is indicative of the position of said photodetector; and" - Faber-Castell uses the iOS or Android device's processing unit(s) as controller that identifies the derivative pattern and this derivative pattern is indicative of the position of the photodetector here embodied by the camera:



The Never-Ending Forest APP from Pablo Manzotti on Vimeo.

**Case study summary** 

I maker wanted seasonal campaign to coincide with start of sc er Ending Forest" app used augmented reality to transform per 500,000 downloads in 90 days, which represents 150% over th

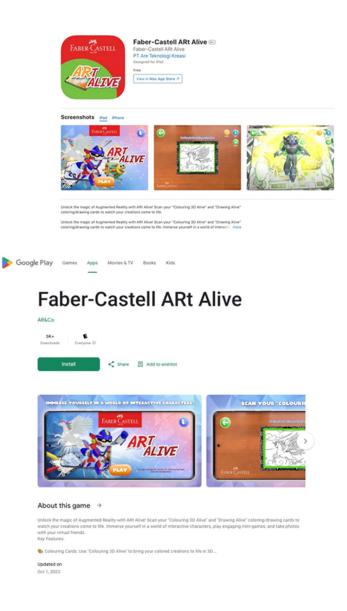
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"c) at least one component selected from the group consisting of an auxiliary motion detection component, an active illumination component and a scanning component." – Faber-Castell uses at least one of the iOS or Android device's auxiliary motion detection components such as inertial device (Inertial Measurement Unit IMU or motion sensing unit).

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12. Similarly, Faber-Castell also infringes Claims 6, 7, 10, 15, 16, 19, 24, and 25.

13. On November 2, 2010, United States Patent No. 7,826,641 B2 entitled "Apparatus And Method For Determining An Absolute Pose Of A Manipulated Object In A Real Three-Dimensional Environment With Invariant Features" was duly and legally issued. A true and correct copy of United States Patent No. 7,826,641 B2 ("the '641 Patent") is attached hereto as Exhibit B and incorporated herein by this reference.

14. Plaintiff is the assignee of the entire right, title and interest in and to the '641 Patent, including all rights to enforce the '641 Patent and to recover for infringement.

# 15. Claim 1 of the '641 Patent claims:

1. An apparatus for processing absolute pose data derived from an absolute pose of a manipulated object in a real three-dimensional environment, said apparatus comprising:

a) at least one invariant feature in said real three-dimensional environment;

b) an optical measuring means for optically inferring said absolute pose from on-board said manipulated object using said at least one invariant feature and expressing said inferred absolute pose with absolute pose data ( $\phi$ ,  $\theta$ ,  $\psi$ , x, y, z) representing Euler rotated object coordinates expressed in world coordinates (X<sub>o</sub>, Y<sub>o</sub>, Z<sub>o</sub>) with respect to a reference location;

c) a processor for preparing said absolute pose data and identifying a subset of said absolute pose data; and

d) a communication link for transmitting said subset to an application.

16. On information and belief, Faber-Castell infringes Claim 1 of the '641 Patent by making, using, selling and/or offering to sell products in the United States, that incorporate or use augmented or virtual reality, such as applications "Colour to Life," "Never Ending Forest," and "ARt Alive" ("Accused Products").

17. Faber-Castell infringes each element of Claim 1 as follows:

"An apparatus for processing absolute pose data derived from an absolute pose of a manipulated object in a real three-dimensional environment, said apparatus comprising:" – To the extent that the preamble is included in an infringement analysis, below demonstrates the various elements: Faber-Castell has an apparatus for processing absolute pose data derived from

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an absolute pose of a manipulated object that is a mobile device such as an iOS or Android device held by a user in a real three-dimensional environment as shown below:





"a) at least one invariant feature in said real three-dimensional environment;" – Faber-Castell uses at least one invariant feature in the real threedimensional environment namely the augmented set such as Colour to Life with their markings including QR codes:

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#### **Product details**

- 15 page colouring book includes 5 designs in various poses to create 5 unique 3D characters
- Ready-to-go set includes everything needed for instant creative fun
   Augmented reality games & activities foster imaginative play and exploration
- Brilliant, vibrant colours promote maximum creative inspiration
- 1.5mm bullet-shaped durable felt-nibs create consistent, precise lines Connectable caps keep pens organised and inspire play and building
- Water-based ink from food dyes is non-toxic and safe for kids
- · Washes out of most fabrics for peace of mind and easy clean-up
- · Breathable non-choke caps ensure worry-free playtime
- · Long-lasting ink means fewer pen replacements

#### Colour to Life augmented reality set

Connector markers paint bright and strong and even have an extra playful benefit: connecting the caps provides many possibilities for games, crafts, and cleanup.



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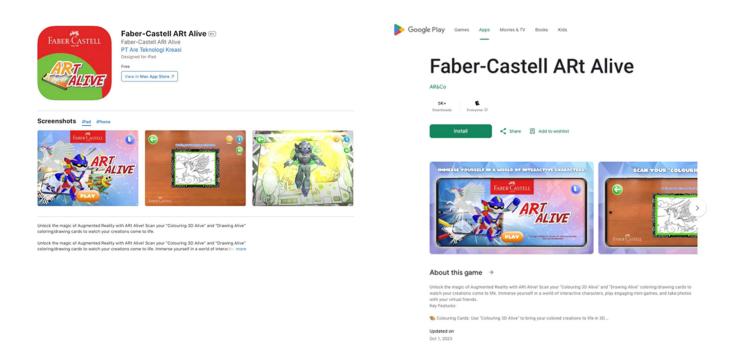
"b) an optical measuring means for optically inferring said absolute pose from on-board said manipulated object using said at least one invariant feature and expressing said inferred absolute pose with absolute pose data ( $\phi$ ,  $\theta$ ,  $\psi$ , x, y, z) representing Euler rotated object coordinates expressed in world coordinates (X<sub>o</sub>, Y<sub>o</sub>, Z<sub>o</sub>) with respect to a reference location;" – Faber-Castell uses a camera of an iOS or Android device as the optical measuring means for optically inferring said absolute pose from onboard an iOS or an Android device:



Further, it uses at least one invariant feature and expressing the absolute pose data by rotation angles (pitch, yaw, roll) expressing the orientation and (x,y,z) expressing the position portions of the absolute pose with respect to a reference location, in other words in world coordinates:



"c) a processor for preparing said absolute pose data and identifying a subset of said absolute pose data; and" – Faber-Castell uses an iOS device's or an Android device's processing unit(s) as controller(s) for preparing the absolute pose data and identifying a subset of the absolute pose data where the subset can include all the pose data.



"d) a communication link for transmitting said subset to an application" – Faber-Castell uses a communication link internal to the manipulated object such as an iOS device or an Android device for transmitting the subset the subset to an application, e.g., their Augmented Reality applications like "Colour to Life," "Art Alive," "Never Ending Forest," and the like:

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Augmented reality case study: Faber-Castell app takes viewers to "Never Ending Forest" Digital marketing industry case study library

Digital marketing mousely case study library

In 2016, pencil brand Faber launched an app using augmented reality, as part of their sustainability project. This case study looks at how the app became the most downloaded educational app at AppStore Brasil.



The Never-Ending Forest APP from Pablo Manzotti on Vimeo.

Case study summary

Pencil maker wanted seasonal campaign to coincide with start of school term
 "Never Ending Forest" app used augmented reality to transform pencils into animals when k
 Got 600,000 downloads in 90 days, which represents 150% over the initial business targetto





Unlock the magic of Augmented Reality with ARt Alive! Scan your "Colouring 3D Alive" and "Drawing Alive" coloring/drawing cards to watch your creations come to life.

Unlock the magic of Augmented Reality with ARt Alive! Scan your "Colouring 3D Alive" and "Drawing Alive" coloring/drawing cards to watch your creations come to life. Immerse yourself in a world of interactive more 18. Similarly, Faber-Castell also infringes Claim 29.

# FIRST CLAIM FOR RELIEF

# (Direct Infringement of the '559 in Violation of 35 U.S.C. § 271(a))

19. ESPi refers to and incorporates herein by reference paragraphs 1-18.

20. The '559 Patent is valid and enforceable.

21. Faber-Castell has infringed and continues to infringe at least Claims 1, 6, 7, 10, 15,

16, 19, 24, and 25 of the '559 Patent under 35 U.S.C. 271(a), either literally or under the Doctrine of Equivalents, by making, using, selling or offering to sell the Accused Products.

22. Faber-Castell has had knowledge and notice of the '559, as well as of its own infringement of the '559, since at least the date of the filing of this Complaint.

ESPi has been and continues to be damaged by Faber-Castell's infringement of the
 '559.

24. Faber-Castell's infringement of the '559 has been and continues to be willful.

# SECOND CLAIM FOR RELIEF

## (Inducing Infringement of the '559 Patent, in Violation of 35 U.S.C. § 271(b))

25. ESPi refers to and incorporates herein by reference paragraphs 1-24.

26. Faber-Castell is also liable for indirect infringement under 35 U.S.C. §271(b), because Faber-Castell knowingly induced and continues to induce the direct infringement of one or more of the Claims by end-users and other third parties (i.e. wholesalers, retailers, customers, etc.) in the United States.

27. Said-users and other third parties have directly infringed at least Claims 1, 10 and 19 of the '559 Patent by using or operating the Accused Products, in the manner for which such Accused Products were and are designed and marketed; that is when the Accused Products are

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used as Faber-Castell intends them to be used, the user and the act of usage thereof necessarily directly infringe the '559 Patent.

28. Faber-Castell knowingly took active steps to induce end-users and other third parties in the United States to engage in direct infringement of the '559 Patent since Faber-Castell knew that when the Accused Products are used for their intended purpose by third parties and end users, such third parties and users directly infringe the claims of the '559 Patent. For example, to induce such third parties' and users' infringement, Faber-Castell, on information and belief, provided, sold, or promoted the Accused Products to end-users or other third parties along with specific instructions or training regarding the use of those products, which instructions or training actively induced said end-users and other third parties to practice one or more of the Claims and said instructions or training caused direct infringement of such Claims.

29. Faber-Castell possessed the specific intent to induce direct infringement of the Claims by end-users and other third parties which intent was manifested, inter alia, by its instructions and/or training for using the Accused Products to end users and third parties, and sale of the Accused Products to end users and third parties, and its knowledge of the '559 Patent and its knowledge that any use of the Accused Products by end-users and other third parties would necessarily directly infringe one or more of the claims of the '559 Patent.

30. Faber-Castell knew or should have known that testing, demonstrating, marketing, making, using, offering to sell, selling, and/or importing the Accused Products constituted infringement of one or more of the claims of the '559 Patent, based on, among other things, the reasons alleged in the foregoing paragraph.

31. By reason of the acts of Faber-Castell herein, ESPi has suffered damage in an amount to be proved at trial.

## THIRD CLAIM FOR RELIEF

# (Direct Infringement of the '641 in Violation of 35 U.S.C. § 271(a))

32. ESPi refers to and incorporates herein by reference paragraphs 1-31.

33. The '641 Patent is valid and enforceable.

34. Faber-Castell has infringed and continues to infringe at least Claims 1 and 29 of the '641 Patent under 35 U.S.C. 271(a), either literally or under the Doctrine of Equivalents, by making, using, selling or offering to sell the Accused Products.

35. Faber-Castell has had knowledge and notice of the '641, as well as of its own infringement of the '641, since at least the date of the filing of this Complaint.

36. ESPi has been and continues to be damaged by Faber-Castell's infringement of the '641.

37. Faber-Castell's infringement of the '641 has been and continues to be willful.

# FOURTH CLAIM FOR RELIEF

## (Inducing Infringement of the '641 Patent, in Violation of 35 U.S.C. § 271(b))

38. ESPi refers to and incorporates herein by reference paragraphs 1-37.

39. Faber-Castell is also liable for indirect infringement under 35 U.S.C. §271(b), because Faber-Castell knowingly induced and continues to induce the direct infringement of one or more of the Claims by end-users and other third parties (i.e. wholesalers, retailers, customers, etc.) in the United States.

40. Said-users and other third parties have directly infringed at least Claims 1 and 29 of the '641 Patent by using or operating the Accused Products, in the manner for which such Accused Products were and are designed and marketed; that is when the Accused Products are

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used as Faber-Castell intends them to be used, the user and the act of usage thereof necessarily directly infringe the '641 Patent.

41. Faber-Castell knowingly took active steps to induce end-users and other third parties in the United States to engage in direct infringement of the '641 Patent since Faber-Castell knew that when the Accused Products are used for their intended purpose by third parties and end users, such third parties and users directly infringe the claims of the '641 Patent. For example, to induce such third parties' and users' infringement, Faber-Castell, on information and belief, provided, sold, or promoted the Accused Products to end-users or other third parties along with specific instructions or training regarding the use of those products, which instructions or training actively induced said end-users and other third parties to practice one or more of the Claims and said instructions or training caused direct infringement of such Claims.

42. Faber-Castell possessed the specific intent to induce direct infringement of the Claims by end-users and other third parties which intent was manifested, inter alia, by its instructions and/or training for using the Accused Products to end users and third parties, and sale of the Accused Products to end users and third parties, and its knowledge of the '641 Patent and its knowledge that any use of the Accused Products by end-users and other third parties would necessarily directly infringe one or more of the claims of the '641 Patent.

43. Faber-Castell knew or should have known that testing, demonstrating, marketing, making, using, offering to sell, selling, and/or importing the Accused Products constituted infringement of one or more of the claims of the '641 Patent, based on, among other things, the reasons alleged in the foregoing paragraph.

44. By reason of the acts of Faber-Castell alleged herein, ESPi has suffered damage in an amount to be proved at trial.

#### PRAYER FOR RELIEF

WHEREFORE, ESPi prays for relief as follows:

A. Judgment that Faber-Castell has directly infringed, and induced others to infringe, the '559 Patent either literally and/or under the doctrine of equivalents;

B. Judgment that Faber-Castell has directly infringed, and induced others to infringe, the '641 Patent either literally and/or under the doctrine of equivalents;

C. Judgment awarding ESPi general and/or specific damages, including a reasonable royalty and/or lost profits, in amounts to be fixed by the Court in accordance with proof, including enhanced and/or exemplary damages, as appropriate, as well as all of Faber-Castell's profits or gains of any kind from its acts of patent infringement.

D. Judgment awarding ESPi all of its costs, including its attorneys' fees, incurred in prosecuting this action, including, without limitation, pursuant to 35 U.S.C. § 285 and other applicable law;

E. Judgment awarding ESPi pre-judgment and post-judgment interest; and

F. Judgment awarding ESPi such other and further relief as the Court may deem just and proper.

#### JURY DEMAND

Pursuant to Federal Rule of Civil Procedure 38(b), ESPi hereby demands a trial by jury on all issues triable to a jury.

Dated: November 20, 2024

Respectfully submitted,

SAND, SEBOLT & WERNOW CO., LPA

/s/ Howard L. Wernow

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