UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

WASHINGTON STATE UNIVERSITY, Plaintiff, v. PHYTELLIGENCE, INC., Defendant.	No. 2:18-cv-00361 COMPLAINT FOR PATENT INFRINGEMENT AND BREACH OF CONTRACT JURY TRIAL DEMANDED

For its complaint against Defendant Phytelligence, Inc. ("Phytelligence"), Plaintiff Washington State University ("WSU") alleges as follows:

I. INTRODUCTION

1. This case involves WSU's rights in the patented apple cultivar known as WA 38, the tree that bears COSMIC CRISP brand apples. Phytelligence entered into a propagation agreement that permitted Phytelligence to propagate WA 38 trees, but that strictly forbade it from transferring or selling the trees to any third party. The propagation agreement also gave Phytelligence the possibility of obtaining permission in the future to sell WA 38 trees as well as propagating them. To this day, Phytelligence has never taken the steps necessary to obtain that permission. Rather, in violation of the propagation agreement, Phytelligence has sold and delivered WA 38 trees to at least one grower, Evans Fruit Company. By its actions, Phytelligence has infringed both the plant patent that protects the WA 38 cultivar and WSU's

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COSMIC CRISP trademark, and breached the propagation agreement. WSU brings this action to obtain redress for Phytelligence's patent infringement.

II. PARTIES

2. WSU is a state university of the State of Washington.

3. Phytelligence is a Washington corporation with its principal place of business in Seattle, Washington. Phytelligence has regular and established places of business located in Seattle, Burien, and Pullman, Washington.

III. JURISDICTION AND VENUE

4. This Court has subject matter jurisdiction over the claim for patent infringement asserted in this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

5. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1400(b) because Phytelligence resides in this judicial district, and because Phytelligence has committed acts of infringement and has regular and established places of business within this judicial district.

IV. FACTS

A. Development of WA 38 and COSMIC CRISP Apples

6. Beginning in 1998, WSU Professor Bruce H. Barritt began the work that resulted in the new apple variety that is now called WA 38. Dr. Barritt selected the WA 38 cultivar from among thousands of seedlings that he created by cross-pollinating existing apple varieties. The seed for WA 38 was germinated and grown in a greenhouse at the Washington State University Tree Fruit Research and Extension Center in Wenatchee in 1998. The WA 38 seedling was transferred to a collaborating commercial nursery in May 1998, where it grew until September 1999, when it was budded onto root stock. The resulting tree was planted in WSU's Columbia View Orchard in April 2001. Dr. Barritt and his co-workers evaluated fruit from this original budded tree in 2002 and 2003. Based on the excellent quality of that fruit, a second generation of trees was created in September 2004 by taking buds from the original seedling tree and propagating them onto root stock. These second generation trees were planted at three sites in Washington state. Additional trees were propagated in 2006 by

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propagating buds from the original seedling tree onto root stock. These trees were used for larger scale plantings in 2008 at four commercial orchard sites in central Washington. Since 2008, trees reproduced from the original seedling tree have been grown in four locations across Washington and evaluated for horticultural traits and storage behavior by WSU Professor Katherine Evans and scientists from the Washington Tree Fruit Research Commission. A comparison of the second generation trees against the originally budded tree showed them to be essentially the same and stable over the years 2009 through 2012.

7. On February 23, 2012, Dr. Barritt filed an application with the United States Patent & Trademark Office seeking a plant patent on the WA 38 apple tree. The United States Patent & Trademark Office issued U.S. Plant Patent No. 24,210, which discloses and claims the WA 38 apple tree, on February 4, 2014. A copy of U.S. Plant Patent No. 24,210 is attached to this complaint as Exhibit A. U.S. Plant Patent No. 24,210 has been assigned to WSU.

8. An apple from a WA 38 apple tree is large and juicy, and remarkably firm with crisp texture. Its flavor profile provides ample sweetness and tartness, making it an excellent eating apple. It is also slow to brown when cut and maintains its texture and flavor in storage for more than a year.

9. WA 38 is the generic name for the apple cultivar that Dr. Barritt developed and is claimed by U.S. Plant Patent No. 24,210. WSU has adopted the trademark COSMIC CRISP as a brand name for use in marketing those trees and the apples they produce. The U.S. Patent and Trademark Office has issued U.S. Trademark Registration No. 5,330,199 to WSU for the trademark COSMIC CRISP in connection with apples and apple trees, and WSU has common law rights in the COSMIC CRISP trademark that predate the issuance of the registration.

10. WSU issues licenses to grow WA 38 apple trees and to use the COSMIC CRISP trademark only to growers located in the state of Washington. As of 2017, approximately 629,000 WA 38 trees had been planted in Washington, and approximately 5,000,000 additional WA 38 trees are expected to be planted in 2018. COSMIC CRISP brand apples are expected to be on the market in significant quantities beginning in 2019.

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B. Phytelligence and the Propagation Agreement

11. On information and belief, Phytelligence was formed in 2011 to commercialize technology that was developed at WSU by WSU Professor Amit Dhingra, Ph.D., in areas including soilless tissue culture and ripening chemistries. In 2012, Washington State University Research Foundation ("WSURF") granted Phytelligence an exclusive, royalty-bearing license on this WSU-developed technology, and in connection with the grant of that license Phytelligence issued shares in the company to WSURF. WSU has since succeeded to WSURF's rights and obligations under the exclusive license agreement with Phytelligence. WSU has an interest in the company's success, because it receives royalties based on revenue Phytelligence earns from the licensed technologies, and because it has a beneficial interest in the shares that Phytelligence issued to WSURF.

12. In November 2012, Phytelligence and WSURF entered into an Agreement to Propagate Apple Cultivar Plant Materials for Washington State University (the "Propagation Agreement"). A copy of the Propagation Agreement is attached as Exhibit B. WSU has since succeeded to WSURF's rights and obligations under the Propagation Agreement.

13. The Propagation Agreement grants Phytelligence permission to propagate WA 38 apple trees, subject to strict limits. Phytelligence was free to propagate as many or as few WA 38 trees as it desired (or none at all), using budwood obtained from a source approved by WSU. The Propagation Agreement specifies that any WA 38 trees propagated by Phytelligence would remain the sole and absolute property of WSU or WSURF, unless Phytelligence later obtained permission to distribute them to third parties.

14. Under the Propagation Agreement, Phytelligence's only affirmative obligations with respect to WA 38 trees it propagated were to (a) secure them against misappropriation by third parties to the best of its ability, (b) pay all costs of establishing and maintaining the trees, (c) permit WSU Professor Katherine Evans a reasonable opportunity to observe the trees upon request, and (d) provide annual written propagation reports. The Propagation Agreement forbade Phytelligence to ship, transport, transfer, sell, offer to sell, or disclose any information

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regarding WA 38 trees to any third party, or to abandon any of the trees. The Propagation Agreement does not grant permission to use the COSMIC CRISP trademark.

15. The Propagation Agreement also granted Phytelligence the opportunity to participate as a provider or seller of WA 38 trees, if WA 38 was officially released by WSU and became available for licensing by WSURF, or an agent of WSURF. The Propagation Agreement specifies that, if these conditions are met, Phytelligence would need to sign a separate contract with WSURF, or an agent of WSURF to take advantage of this opportunity.

16. Before it entered into the Propagation Agreement, Phytelligence was aware that agreement did not grant it permission to sell WA 38 trees, and was also aware that there was no guarantee that it would ultimately obtain permission to participate as a provider or seller of WA 38 trees. Shortly before he executed the Propagation Agreement, Phytelligence's then-CEO Chris Leyerle exchanged email messages regarding the terms of the draft agreement with Tom Kelly, WSURF's Technology Manager. In that email exchange, Mr. Leyerle stated, "My reading is that the agreement allows Phytelligence to propagate WA-38 as much as we like, and to acquire, grow and maintain derivative plant material at our sole expense, but without any ability to sell it. True?" Mr. Kelley responded, "Yes, true at this time." Mr. Leyerle also wrote, "If I understand the language correctly, we have an 'option' to sell WA-38 plantlets at an indeterminate future date if and only if WSU/WSURF decide both to commercialize and to grant us a separate license for the purpose of selling." In response, Mr. Kelly stated Mr. Leyerle's understanding was correct and warned that "there exists the possibility that if we license WA 38 to an exclusive licensee, that company/person/group may want to do his/her own plant propagation without outside assistance or may want to do that under contract with its own contractors." Not long after this email exchange, Mr. Leyerle signed the Propagation Agreement on behalf of Phytelligence.

C. Commercialization of WA 38

17. In 2014, after U.S. Plant Patent No. 24,210 issued, WSU entered into a management contract with Proprietary Variety Management, LLC ("PVM") under which PVM

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would commercialize WA 38, by licensing nurseries to propagate WA 38 trees and sell them to growers, and licensing growers to grow WA 38 trees and sell apples from those trees under the COSMIC CRISP trademark. The management contract provides that PVM will work with the Northwest Nursery Improvement Institute ("NNII"), a nonprofit association of nurseries located in the Pacific Northwest that grow and sell fruit trees for the tree fruit industry, in the commercialization process. Namely, PVM would subcontract exclusively with NNII, which would then grant licenses to its member and affiliated nurseries allowing them to propagate WA 38 trees for sale to growers.

18. As of summer 2014, commercial licenses to propagate and sell WA 38 trees were available to any member of NNII. By spring 2017, eleven nurseries had obtained such licenses.

19. Phytelligence did not take any steps to obtain a license for commercial propagation of WA 38 trees until late March 2016, when it contacted WSU asking how to obtain one. In early April 2016, WSU put Phytelligence in touch with PVM and NNII, who instructed Phytelligence to submit an application for membership in NNII as a first step toward obtaining a commercial propagation license. Phytelligence never submitted an application for membership in NNII.

20. Phytelligence again contacted WSU regarding obtaining a commercial propagation license for WA 38 in 2017. WSU informed Phytelligence in June 2017 that it should contact NNII to start the process of becoming a member. In response, Phytelligence asked to receive a commercial propagation license for WA 38 without having to become a member of NNII by receiving a license directly from WSU or PVM.

21. In an effort to accommodate Phytelligence, in September 2017, WSU and PVM offered Phytelligence three ways in which it could obtain a commercial license to propagate and sell WA 38 trees. The first option was the one contemplated in the management contract between WSU and PVM: Phytelligence would apply for and obtain membership in NNII, and receive from NNII a license to propagate and sell WA 38 trees. Alternatively, if Phytelligence

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chose not to apply for membership in NNII, or if NNII were to reject its application for membership, Phytelligence could commercially propagate WA 38 under the other two options: either by contracting with an NNII member nursery, or by contracting with a grower having land in the state of Washington who is unable to fulfill its needs for WA 38 trees from NNII member nurseries. Phytelligence declined to pursue any of these three options and never applied to become a member of NNII.

22. In December 2017 and January 2018, WSU learned that Phytelligence had sold and delivered WA 38 trees to a grower despite the prohibitions of the Propagation Agreement. Documents that WSU obtained from Phytelligence showed that in April 2016, Phytelligence sold 135,000 WA 38 trees, using the COSMIC CRISP trademark, to a grower, Evans Fruit Company. Phytelligence was aware in April 2016 that it did not have permission to sell WA 38 trees or to use the COSMIC CRISP trademark.

23. This sale was a clear violation of the Propagation Agreement, and also of WSU's patent and trademark rights. WSU therefore notified Phytelligence on January 16, 2018, that it was terminating the Propagation Agreement, effective March 17, 2018. WSU also directed Phytelligence to destroy all WA 38 plant material in its possession, custody, or control within 30 days, as required by Section 7 of the Propagation Agreement. In the same letter by which it terminated the Propagation Agreement, WSU stated that Phytelligence could still pursue the established PVM/NNII process for obtaining a WA 38 license, i.e., applying for and obtaining membership in NNII and obtaining a commercial propagation license via NNII.

24. To date, Phytelligence has refused to destroy the WA 38 plant material in its possession, custody, or control.

25. Apparently believing that the best defense is a good offense, Phytelligence sued WSU in King County, Washington, Superior Court on February 26, 2018, contending that WSU is in breach of the Propagation Agreement because Phytelligence has not obtained a commercial propagation license.

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26. WSU's claims for patent infringement, trademark infringement, and breach of contract that stem from Phytelligence's sale and delivery of WA 38 trees to Evans Fruit may arise out of the transaction or occurrence that is the subject matter of Phytelligence's King County Superior Court action against WSU. But WSU cannot assert all of those claims against Phytelligence in a single action. WSU cannot assert its patent infringement claim in King County Superior Court, because federal law bars state courts from hearing patent infringement cases. 28 U.S.C. § 1338(a). Although this Court has subject matter jurisdiction over the trademark infringement and breach of contract claims pursuant to 28 U.S.C. §§ 1338 and 1367(a), WSU cannot risk asserting those claims here because under Rule 13(a) of the Washington Superior Court Civil Rules they are compulsory counterclaims to the claim for breach of the Propagation Agreement that Phytelligence has asserted in King County Superior Court. WSU therefore asserts in this Court only its patent infringement claim against Phytelligence, and is asserting its trademark infringement and breach of contract claims as a counterclaim in King County Superior Court.

V. CLAIM FOR RELIEF

Patent Infringement

27. Phytelligence has infringed U.S. Plant Patent No. 24,210 by offering for sale and selling the plants of the WA 38 cultivar that the patent describes and claims.

28. Phytelligence's infringing conduct was and is without authority, consent, or license.

29. Phytelligence has been on notice of U.S. Plant Patent No. 24,210 since at least as early as March 2016, when it asked WSU how to obtain a license to sell WA 38

30. Phytelligence infringed U.S. Plant Patent No. 24,210 despite an objectively high likelihood that its actions constituted infringement of this valid patent. Phytelligence's infringement of U.S. Plant Patent No. 24,210 therefore has been willful.

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31. WSU has suffered irreparable harm, and will continue to suffer irreparable harm, unless Phytelligence is enjoined from infringing U.S. Plant Patent No. 24,210. WSU has no adequate remedy at law.

32. WSU is entitled to recover from Phytelligence the damages sustained by WSU as a result of Phytelligence's infringing acts in an amount WSU will prove at trial, including, but not limited to, lost profits or reasonable royalty, together with interest and costs, as well as attorneys' fees, should the Court deem the case to be exceptional.

VI. PRAYER FOR RELIEF

WSU respectfully requests that the Court enter judgment:

A. Finding that Phytelligence has infringed U.S. Plant Patent No. 24,210 and that its infringement has been willful;

B. Awarding WSU damages adequate to compensate for Phytelligence's infringement of U.S. Plant Patent No. 24,210, including supplemental damages for any post-verdict patent infringement up until entry of the final judgment with an accounting as needed, together with prejudgment and post-judgment interest on the damages awarded; all of these damages to be enhanced in an amount up to treble the amount of compensatory damages pursuant to 35 U.S.C. § 284;

C. Finding this case is exceptional under 35 U.S.C. § 285 and awarding WSU its reasonable costs and expenses of litigation, including attorneys' and experts' fees;

D. Granting preliminary and permanent injunctions pursuant to 35 U.S.C. § 283, enjoining Phytelligence, its officers, agents, servants, employees, and attorneys, and other persons who are in active concert or participation with any of the foregoing, from further acts of infringement of U.S. Plant Patent No. 24,210; and

E. Awarding WSU such other and further relief that the Court may deem just and equitable.

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VII. JURY DEMAND

WSU demands a trial by jury on all issues so triable.

DATED March 8, 2018.

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EXHIBIT A

US00PP24210P3

(12) **United States Plant Patent**
Barritt

(10) **Patent No.: US PP24,210 P3**
(45) **Date of Patent: Feb. 4, 2014**

(54) **APPLE TREE NAMED 'WA 38'**

(50) Latin Name: ***Malus domestica***
Varietal Denomination: **WA 38**

(75) Inventor: **Bruce H. Barritt**, Okanagan Centre (CA)

(73) Assignee: **Washington State University Research Foundation**, Pullman, WA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 93 days.

(21) Appl. No.: **13/385,545**

(22) Filed: **Feb. 23, 2012**

(65) **Prior Publication Data**

US 2013/0227750 P1 Aug. 29, 2013

(51) **Int. Cl.**
A01H 5/00 (2006.01)

(52) **U.S. Cl.**
USPC **Plt./161**

(58) **Field of Classification Search**
USPC Plt./161, 170
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

PP7,197 P * 3/1990 Luby et al. Plt./161

* cited by examiner

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(57) **ABSTRACT**

A new and distinctive variety of a *Malus domestica* apple tree, named 'WA 38' that is distinguished by its intense and nearly full color, internal indices that are different than its parents, and its long common storage life.

4 Drawing Sheets

Latin name of the genus and species of the claimed plant: Botanical/commercial classification: *Malus domestica*/apple tree.

Varietal denomination: 'WA 38'.

BACKGROUND OF THE INVENTION

The invention refers to a new plant variety of apple tree (*Malus domestica*) named 'WA 38'. This new variety is distinguished by its intense and nearly full color, internal indices that are different than its parents, and its long common storage life.

'WA 38' originated as a single seedling from a cross of the patented varieties 'Enterprise' (U.S. Plant Pat. No. 9,193) and 'Honeycrisp' (U.S. Plant Pat. No. 7,197) in Year 1. The germinated seedling was grown in a greenhouse at Wenatchee, Wash. In September of Year 2, 'WA 38' was chip budded onto 'M9' rootstock and the resulting tree was planted in the evaluation orchard at Douglas County, Wash. in the spring of Year 5. Fruit from this originally budded tree were observed in Year 7 and Year 8 and due to the unique fruit quality traits, 'WA 38' was selected and second generation trees were made by chip budding onto M9 rootstock in the fall of Year 8. Second generation trees were planted at three locations in Washington State near Chelan, Douglas County, Wash.; near East Wenatchee, Douglas County, Wash.; and near Basin City, Franklin County, Wash. A comparison of second generation trees against the originally budded tree, including trunk, branches, leaves, flowers, and fruit; showed them to be essentially the same and stable over the years checked (Years 12, 13, 14, and 15).

SUMMARY OF THE INVENTION

The 'WA 38' apple tree variety exhibits exceptionally long storage life in common storage. 'WA 38' loses little of its

crispness, sugar, and acid following five months of storage, whereas that of its parents declines considerably. The appearance of 'WA 38' fruit is nearly full color and has an intensity that is unique among other apple varieties of the same season. Like both its parents (i.e., 'Enterprise' and 'Honeycrisp'), 'WA 38' is heterozygous for the ASC1 gene and homozygous for the ACO1 gene, both of which are involved in ethylene production. These genes confer low ethylene production, which in turn affects storage life. The ACS1 and ACO1 genotypes were determined using the method described in Zhu and Barrit (2008). The harvest maturity of 'WA 38' is approximately three weeks later than that of the parental variety 'Honeycrisp', and approximately three weeks earlier than that of the parental variety 'Enterprise'. Additionally, the combination of fruit appearance and internal eating qualities of the fruit of 'WA 38' is distinctly different than that of the parental varieties 'Honeycrisp' and 'Enterprise'.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1**. View of the dormant stage of 'WA 38' originally budded tree.

FIG. **2**. View of blossoms from the originally budded tree of 'WA 38'.

FIG. **3**. View of typical 'WA 38' originally budded tree fruit at harvest maturity.

FIG. **4**. View comparing harvest mature fruit of 'WA 38' (top row), and its parents 'Enterprise' (center row), and 'Honeycrisp' (bottom row).

DETAILED BOTANICAL DESCRIPTION

The following detailed description, except for description of fruit, is from the 'WA 38' originally budded tree grown at Orondo, Douglas County, Wash. The 'WA 38' tree was 11 years old when measurements were taken. The USDA hardi-

ness zone 6b. All color references are from The R.H.S. Colour Chart by The Royal Horticultural Society. The seedling was not grown on its own roots, as standard production of apple trees involves propagation on a rootstock.

Tree:

Type.—Spreading; moderately heavy spur development, and precocious with spur development beginning on two-year old wood.

Vigor.—Considered moderate on the low side with the current season's growth ranging from 26.0 cm to 50.2 cm with an average of 37.0 cm.

Overall shape.—Original budded tree was supported by securing the central leader to a 3-wire trellis; no branch training was performed and pruning was minimal; only branches that were likely to impact routine field operations or that were broken were removed; as such, the overall observed shape was upright and spreading with a height of 16 feet and width of 14 feet.

Height.—16 feet.

Width.—14 feet.

Hardiness.—Considered hardy for the regions grown in; USDA hardiness zone 6b.

Productivity.—Considered high.

Trunk:

Size.—Diameter at a height of 30 cm above graft union is 10.3 cm.

Bark texture.—Considered smooth for 11 year old tree.

Bark color.—Greyed-orange (RHS 199A).

Lenticels.—Present and moderate in number averaging 6 lenticels per 9 cm^2; shape is elongated and oriented horizontally; average width is 1.7 mm; average length is 10.9 mm.

Lenticels color.—Brown (RHS N200A).

Branches:

First year branches.—Diameter: at mid-point of growth ranges from 3.7 mm to 5.0 mm and averages 4.5 mm. Length: current season's growth ranges from 26.0 cm to 50.2 cm with an average of 37.0 cm. Bark color: greyed-orange (RHS 176A). Lenticels: numerous present, averaging 17 lenticels in a 1 cm section of branch; shape is mostly round with a few oval in shape; oriented vertically; diameter ranges from 0.4 mm to 0.9 mm; oval dimensions range from 1.4 mm to 1.6 mm in length and 0.7 mm in width; and color is green-white (RHS 157D).

Scaffold branches.—Size: ranges from 4.2 cm to 7.9 cm in diameter with an average of 5.9 cm as measured 10 cm from the trunk. Angle: moderately flat to near flat, ranging from 75 to 85 degrees from vertical. Branch color: grey-brown (RHS 199A). Lenticels: few in number, averaging 11 lenticels per 9 cm^2; shape and size is variable, mostly elongated, with some round; length ranges from 8.4 mm to 18.9 mm and width ranges from 1.0 mm to 1.7 mm; round diameter ranges from 1.0 mm to 1.3 mm; orientation is horizontal; and color is greyed-orange (RHS 166D).

Leaves:

Shape.—Considered broadly acute on the round side and is upward folding.

Texture.—Upper surface is leathery with some puckering; lower surface is smooth with some puckering.

Sheen.—Upper surface has a high sheen.

Pubescence.—Present on lower surface only covering 100% and is moderately heavy; color of lower surface pubescence is greyed-yellow (RHS 160D); light covering of white pubescence (RHS 155B) is found along veins of upper surface.

Length.—Blade length ranges from 7.2 cm to 8.9 cm with an average of 8.1 cm.

Width.—Ranges 5.2 cm to 6.3 cm with an average of 5.7 cm.

Margin.—Serrate with a few bi-serrate regions.

Tip.—Acuminate.

Base.—Rounded.

Stipules.—Present on most petioles; 0 to 2 present with most being 1; shape is acicula; length ranges from 2.0 mm to 6.3 mm with an average of 4.4 mm; width at base ranges from 1.0 mm to 1.6 mm with an average 1.3 mm; color of upper and lower surface is yellow-green (RHS 1146D); and pubescence is present on both upper and lower surfaces, considered fine with 100% coverage over both surfaces; pubescence color is greyed-yellow (RHS 160D).

Leaf blade color.—Upper surface is yellow-green (RHS 147A); lower surface is yellow-green (RHS 147C).

Mid-vein.—Prominent with considerable fine pubescence on under surface of vein; width at mid blade ranges from 1.1 mm to 1.6 mm with an average 1.4 mm; upper surface color is yellow-green (RHS 147A); lower surface color is yellow-green (RHS 147C); pubescence covering 100% of the lower surface is greyed-yellow (RHS 160D).

Petiole.—Length ranges from 24.5 mm to 35.9 mm with an average of 30.1 mm; shallow groove runs the entire length of the upper surface; diameter at mid point ranges from 1.4 mm to 1.9 mm with an average of 1.7 mm; color of upper surface is yellow-green (RHS 145C); color of lower surface is yellow-green (RHS 145D); pubescence is abundant and fine over the entire length and circumference of the petiole; color of pubescence is greyed-yellow (RHS 160D).

Buds.—Usually on single spurs; shape is considered acute with base being truncate with spur; diameter ranges from 4.1 mm to 4.9 mm with an average of 4.4 mm; length ranges from 6.6 mm to 10.2 mm with an average of 8.3 mm; bud scale color is purple (RHS N77A).

Flowers: Bloom started April 19 and finished May 6, with full bloom date May 1 at Orondo, Douglas County, Wash.; number of blossoms per bud ranges from 4 to 6 with an average of 6; fragrance is apple-blossom like.

Size.—Considered large, when fully expanded the diameter ranged from 51.6 mm to 57.5 mm with an average of 53.9 mm.

Petal.—Width ranges from 18.0 mm to 21.1 mm with an average 19.2 mm; length ranges from 24.4 mm to 27.3 mm with an average 25.2 mm; shape is elliptic; typical petal number is five; petal margins are smooth, both tip and base of petal are rounded; petal surface is slightly glabrous.

Color.—Both upper and lower surfaces are white (RHS 155B); where exposed prior to opening, lower surface has red-purple highlights (RHS 64B).

Stamen.—Number ranges from 18 to 21 with an average of 21; filament length ranges from 5.5 mm to 11.2 mm with an average of 8.5 mm; filament color is white (RHS 155C); anthers are kidney shaped with an average size of 1.6 mm wide×2.7 mm long; mature anther color is yellow (RHS 10D).

Pistil.—Typically five pistils per flower; length ranges from 14.7 mm to 19.7 mm with an average of 17.2 mm. Styles: five in number, fused at ⅓ distance from basal end with the fused region covered in white (RHS 155B) pubescence; color is yellow-green (RHS 145B). Stigma: round club shaped 0.6 to 0.7 mm in diameter; color is yellow-green (RHS 153B).

Sepals.—Five per blossom; shape is considered thin deltoid with the tip being acuminate and the base being truncate; length ranges from 13.2 mm to 8.8 mm with an average of 11.9 mm; width ranges from 3.8 mm to 4.4 mm with an average of 4.1 mm; abundant white (RHS 155B) pubescence is present on both upper and lower surfaces; upper surface color is yellow-green (RHS 146C); lower surface color is yellow-green (RHS 148D); both upper and lower tip surfaces red-purple highlight color (RHS 64B).

Peduncle.—Length ranges from 16.1 mm to 23.0 mm with an average of 19.5 mm; color is yellow-green (RHS 146B); considerable white downiness (RHS 155B) present over the entire surface.

Pollen.—Moderate amounts of pollen are produced, with yellow color (RHS 10D).

Fruit: Observations and testing from 1st generation tree fruit grown at East Wenatchee, Douglas County, Wash.; production is moderate to heavy, falling within the range of existing commercial cultivars.

Form.—Considered uniform round-conical.

Size.—Considered medium large with a normal crop level; equatorial diameter ranges from 80.0 mm to 88.3 mm with an average of 83.9 mm; axis diameter ranges from 76.4 mm to 85.6 mm with an average of 79.0 mm; typical weight ranges from 254 g to 332 g with an average of 281 g.

Stem.—Considered long and medium thick; length ranges from 22.3 mm to 29.5 mm and averages 25.7 mm; diameter ranges from 1.8 mm to 2.8 mm with an average of 2.3 mm; color is yellow-green (RHS 146B).

Stem cavity.—Width ranges from 28.3 mm to 36.1 mm with an average 32.6 mm; depth ranges from 20.9 mm to 23.9 mm with an average of 22.7 mm; occasional light russet over bottom ⅓ of cavity; cavity shape is acuminate; stem cavity is not lipped.

Basin cavity.—Considered abrupt; surface is wavy; puckered around eye; light ribbing; green-white (RHS 157D) downy hairs at base; width ranges from 25.9 mm to 31.5 mm with an average of 28.8 mm; depth ranges from 11.6 mm to 18.4 mm with an average of 13.8 mm.

Eye.—Erect convergent; sepal color is yellow-green (RHS 148C); sepals contain green-white (RHS 157D) downy hairs.

Skin.—Texture is considered tender; thickness is considered thin; appearance is considered more streaked than marbled with scant bloom present; skin color of over streak is greyed-purple (RHS 183B); skin color of under streak is greyed-purple (RHS 183D); skin under color is red (RHS 48A); skin lenticels are numerous, small, round, smooth with the skin; skin lenticels are more numerous towards the calyx end averaging 4 lenticels per cm^2 at stem end, 11 lenticels per cm^2 at calyx end; areolar at the stem end; color is white (RHS 155B) and areolar color is from the red group (RHS 48A); skin lenticel size ranges from 0.2 mm to 0.5 mm in diameter with aerolar diameter ranging from 1.0 mm to 1.5 mm.

Core.—Core position is considered median; core line position is basal meeting; core diameter ranges from 38.7 mm to 46.3 mm with an average of 42.9 mm; core length ranges from 28.2 mm to 32.8 mm with an average of 30.5 mm; core shape is flat conical.

Cell (locule or carpel).—Five per fruit; not tufted; shape is elliptical; length ranges from 17.1 mm to 23.4 mm with an average of 19.6 mm; width (axis/edge) ranges from 10.9 mm to 12.8 mm with an average of 11.6 mm; depth (wall/wall) ranges from 5.7 mm to 7.5 mm with an average of 6.5 mm.

Tube.—Cone shaped.

Stamen position.—Median relative to stamens situated approximately in the middle of the tube (the cavity just beneath the eye).

Cell attachment to axis.—Axial and open, meaning cells are symmetrical and each cell is open.

Seed.—Number ranges from 1 to 3 with an average of 2; shape is acute; seed length ranges from 8.3 mm to 9.4 mm with an average of 9.0 mm; seed width ranges from 4.0 mm to 4.7 mm with an average of 4.3 mm; seed color is brown (RHS 200D).

Flesh.—Crisp, melting, juicy, sub-acid with mild apple like flavor; color is yellow-white (RHS 158D); flesh browning very little to none after one hour; quality is very good.

Aroma.—Apple like and moderate in intensity.

Date of harvest maturity.—Typically late September/early October, observed harvest maturity of current season was October 2; for any one location, 'WA 38' typically can be classed as a single pick variety; however, harvest can be extended into two picks over a two week period.

Genotype.—WA 38 is heterozygous (1,2) for ACS1 and is homozygous (2,2) for ACO1.

Keeping quality.—Excellent; up to five months in common storage; flesh browns very slightly after being exposed.

Pollination: Any diploid apple of the same bloom season.

Use: For dessert.

Disease and insect resistance: May have some resistance to *Venturia inaequalis* (apple scab) from its maternal parent 'Enterprise'; otherwise is considered to be susceptible to all insects and diseases found in the region of Central Washington.

Table 1 represents maturity indices of the 'WA 38', 'Honeycrisp' and 'Enterprise' varieties. In Table 1, pressure is a measure of fruit firmness, ° Brix is a measure of soluble solid content of fruit, and titratable acid is a measure of fruit acidity. The mature harvest date of 'Enterprise' was October 23, Year 15, and the mature harvest date of 'Honeycrisp' was September 10, Year 15.

TABLE 1

Maturity indices

Variety	Sample Run Date	Pressure (Newtons)	°Brix	pH	Titratable Acid (g/ 100 ml)
'WA 38'	October 2, Year 15	82	12.6	3.47	0.62
'Honeycrisp'	September 10, Year 15	62	12.7	3.52	0.42
'Enterprise'	October 23, Year 15	86	14.3	3.47	0.68

What is claimed:

1. A new and distinct apple tree variety named 'WA 38', as herein shown and described.

* * * * *

Figure 1

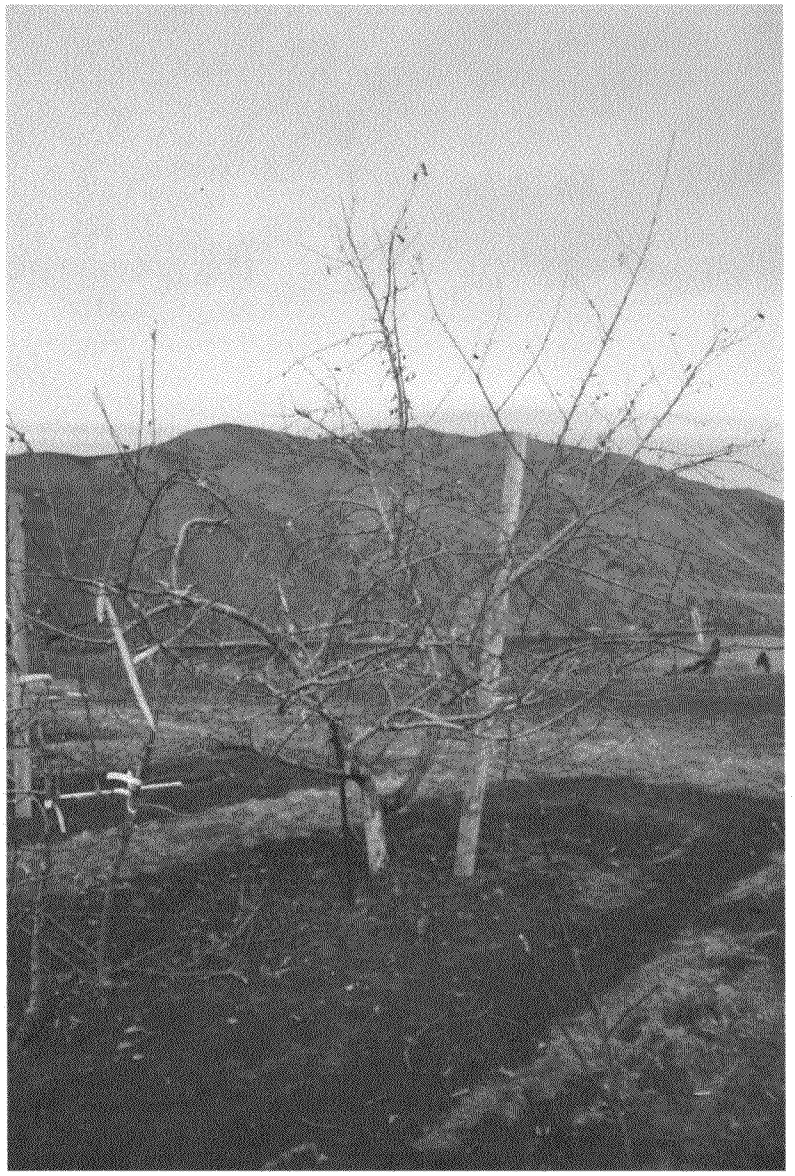

Figure 2

Figure 3

Figure 4

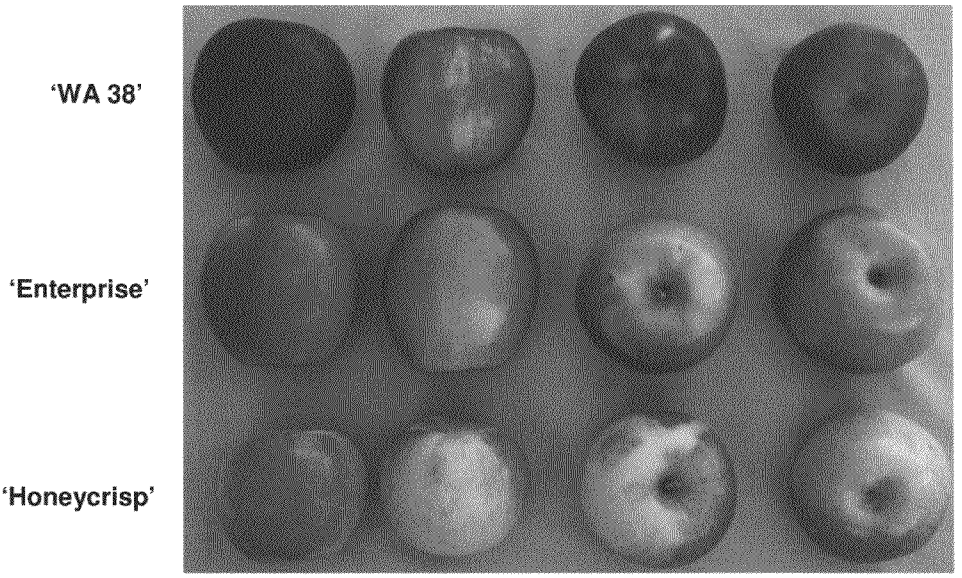

EXHIBIT B

AGREEMENT TO PROPAGATE APPLE CULTIVAR PLANT MATERIALS FOR WASHINGTON STATE UNIVERSITY

This Agreement (hereinafter "Agreement") is made effective November 27, 2012 (hereinafter "Effective Date") between the Washington State University Research Foundation (hereinafter "WSURF"), a nonstock, nonprofit Washington corporation having an office at 1610 NE Eastgate Blvd., Suite 650, Pullman WA 99163, and Phytelligence, Inc. (hereinafter "Propagator"), having a principal place of business at 1300 NE Henley Ct., Pullman, WA 99163.

WHEREAS, certain plant Cultivars (defined below) were developed by Dr. Bruce Barritt and Dr. Katherine Evans (Dr. Evans is hereinafter referred to as "Breeder"), employees of WSU, working either alone or together with other researchers at WSU, and are wholly owned by WSU and/or WSURF;

WHEREAS, WSU and WSURF do not have the facilities to propagate, grow, and maintain a sufficient number of Certified Virus-Tested (defined below) plants of the Cultivars for the purpose of Distributing (defined below) said plants to nurseries, growers, and others under WSURF license agreements;

WHEREAS, WSU and WSURF have requested that Propagator Propagate (defined below) plants of the Cultivars for eventual Distribution, including Distribution to WSU; and

WHEREAS, Propagator is willing to provide this service to WSU and WSURF under the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth below, the parties covenant and agree as follows:

DEFINITIONS: As used in this Agreement, the following terms will have the meaning set forth below:

"Cultivar(s)" shall mean the plants and their corresponding genotypes that are indicated by their WSU selection number or cultivar designation and are listed in Exhibit A to this Agreement.

"Propagate" shall mean to generate or otherwise produce from the Plant Material (defined below) provided by WSU, the authorized number plants of each Cultivar and to grow, care for, and maintain the authorized number of plants of each Cultivar as defined in Exhibit A.

"Distribute(d)" and "Distribution" shall mean the transfer and/or sale of the plants of a particular Cultivar to third parties in accordance with license agreements signed between WSURF and such third parties.

"Plant Material(s)" means the Certified Virus-Tested plants and plant parts, including budwood, of the Cultivars, and derivatives of such plants and plant parts including, but not limited to, plants or vegetative material in vitro, meristematic material, bareroot plants, plants in soil or other material, sports, plant tissue capable of being propagated either in tissue culture or by any other means, isolated seeds or achenes, pollen or ovule, and genetic material derived in whole or in part from the Plant Materials.

"Certified Virus-Tested" means Plant Material that has undergone virus testing by the National Clean Plant Network, WSU Prosser, and is certified as virus-tested under the Washington State Department of Agriculture's ("WSDA's") Washington State Fruit Tree Certification Program.

1. **PROPAGATOR AGREES TO COMPLY WITH THE FOLLOWING TERMS AND CONDITIONS:**

   a. To grow only the specific number of plants of the Cultivars that are listed in Exhibit A, subject to the conditions set forth herein, and in accordance with other instructions, if any, that may be agreed upon from time-to-time between Propagator and Breeder. Propagator is prohibited from using Plant Materials for, including but not limited to, crossbreeding, cross pollination, mutagenesis, or through any genetic engineering techniques. Propagator is also prohibited from using or altering any other plant or plant material using Plant Materials from the Cultivars by, including but not limited to crossbreeding, cross pollination, or through any genetic engineering techniques. Propagator may use its usual commercial techniques for generating plants and/or budwood from Plant Materials under this Agreement.

   b. Not to ship, transport, transfer, sell, offer to sell, and/or disclose any information regarding any of the Cultivars or their Plant Materials to any person or entity, domestic or foreign, for any purpose whatsoever, except in accordance with instructions in this subsection and any instructions to the contrary by Breeder. Propagator shall secure the Plant Materials against misappropriation by third parties to Propagator's best ability to do so. **This explicitly prohibits the transfer of the Cultivars or their Plant Materials for commercial purposes including providing photographs or other images of the Plant Materials in, but not limited to, any catalog, brochure, price list, popular press, e-mail, or website unless Propagator has authorization to do so under a separate contract with WSURF, or an agent of WSURF, in accordance with Section 4 of this Agreement.** Notification by e-mail is acceptable written notification.

   c. Not to abandon any of the Plant Materials. Moreover, should Propagator sell, or otherwise relinquish, any part of the land identified in Exhibit A as Propagator's location, Propagator must destroy, at Propagator's own expense, the Plant Materials located there before a third party acquires said land, unless other arrangements are made with WSURF prior to sale or relinquishment of land.

   d. To pay for all costs of establishing and maintaining plants of the Cultivars. Propagator acknowledges that any costs and charges associated with obtaining the plants of the Cultivars do not constitute a sale thereof by WSU or WSURF to Propagator.

   e. To permit Breeder or agent of WSURF the reasonable opportunity to observe Propagated Plant Materials, if requested, for the purpose of: a) inspecting the Plant Materials, b) collecting data, and c) determining compliance by Propagator with the terms of this Agreement.

   f. To provide Breeder with annual written Propagation reports, if any, in a format agreed upon between Propagator and Breeder.

2. WARRANTY: WSU AND WSURF MAKE NO REPRESENTATIONS AND EXTEND NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED. NEITHER WSU NOR WSURF GUARANTEES THE PERFORMANCE OF THE PLANT MATERIALS, NOR THE FRUIT, NOR THEIR FREEDOM FROM PESTS AND/OR DISEASES. HOWEVER, TO THE BEST OF WSU'S AND WSURF'S KNOWLEDGE, THE PLANT MATERIALS ARE FREE FROM PESTS AND/OR DISEASES THAT MAY POSE A THREAT TO COMMERCIAL PRODUCTION. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, NOR DOES WSU OR WSURF WARRANT THAT THE PLANT MATERIALS WILL NOT INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK, OR OTHER INTELLECTUAL PROPERTY RIGHTS. NEITHER WSU NOR WSURF SHALL BE RESPONSIBLE FOR DAMAGE TO PLANT MATERIALS IN TRANSIT OR LOSSES DUE TO POOR GROWING CONDITIONS OR IMPROPER CARE.

3. OWNERSHIP OF PLANT MATERIAL: Propagator acknowledges that Plant Material of the Cultivars that has not been Distributed shall remain the sole and absolute property of WSU and/or WSURF. Any sports or mutations discovered on any plants of the Cultivars being grown by Propagator shall be immediately reported to Breeder and shall be the exclusive property of WSU.

4. OPTION TO PARTICIPATE AS A PROVIDER AND/OR SELLER IN WSURF LICENSING PROGRAMS: If Propagator is an authorized provider in good standing under WSDA's Washington State Fruit Tree Certification Program in accordance with Section 5, below, by signing this Agreement, Propagator is hereby granted an option to participate as a provider and/or seller of Plant Materials listed in Exhibit A, if the Cultivar is officially released by WSU and becomes available for licensing by WSURF, or an agent of WSURF. Propagator will need to sign a separate contract with WSURF, or an agent of WSURF, to exercise this option. If any of the WSU Cultivars listed in Exhibit A are not released by WSU, Propagator agrees to destroy all Plant Materials of such Cultivars upon written notification by WSURF that it will not release a specific Cultivar. It is anticipated that this Agreement will be amended from time-to-time to include additional Cultivars under Exhibit A.

5. SOURCE OF CERTIFIED VIRUS-FREE PLANT MATERIAL/STATUS OF PROPAGATOR UNDER NRSP5 PROGRAM:

   a. Propagator may obtain Certified Virus-Tested Plant Material from the manager of the NRSP5 Program (WSU's IAREC, Prosser, WA) or Certified Virus-Tested trees from any site approved under the Washington State Fruit Tree Certification Program once this Agreement has been signed between Propagator and WSURF.

   b. By accepting Certified Virus-Free Plant Materials, Propagator warrants that it is an authorized participant under the Washington State Fruit Tree Certification Program and that it will Propagate the Plant Materials in accordance with the requirements of that Program.

6. PUBLICITY: Propagator shall not use the name of WSU, nor any adaptation, symbol, or logo of WSU in any advertising, promotional, or sales literature without the prior written permission of WSU or WSURF.

7. TERMINATION: Either party may terminate this Agreement prior to the Termination Date (defined below) with respect to any or all of the Cultivars listed in Exhibit A of this Agreement for any reason by providing sixty (60) days written notice to the other party. Propagator agrees to destroy, or relinquish control of, any, or all, Cultivars covered in the written notification within thirty (30) days of the date of notice of termination. If there has been no prior notice of termination by either party, this Agreement will expire on the Termination Date of December 31, 2020. Both parties may mutually agree to extend this Agreement in five (5) year increments. Propagator agrees to destroy all Plant Materials of the Cultivars within thirty (30) days of the Termination Date if there has been no extension of this Agreement before the Termination Date.

8. GOVERNING LAW: This Agreement will be interpreted and construed in accordance with the laws of the state of Washington, including the rights associated with breech, indemnification, injunctive relief, and/or untimely or wrongful disclosure of proprietary information.

9. NOTICES: Any notices pursuant to this Agreement shall be in writing and addressed to the intended party at the address below.

To WSURF:	To Propagator:
WSURF Attn: Executive Director 1610 NE Eastgate Blvd., Suite 650 Pullman, WA 99163	Phytelligence, Inc. c/o: CHRIS LEYERLE 1300 NE Henley Ct. Pullman, WA 99163

10. ASSIGNMENT: The rights associated to the Plant Materials of the Cultivars and/or the responsibilities of the Propagator in this Agreement may not be assigned to any third party by Propagator except with the prior written consent of WSURF.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date set forth herein by their duly authorized representatives.

WASHINGTON STATE UNIVERSITY RESEARCH FOUNDATION

Anson Fatland, Interim Executive Director

Date: 11/28/12

PHYTELLIGENCE, INC.

By: _____

Name: CHRIS LEYERLE
(please print)

Title: CEO

Date: 11/27/12

EXHIBIT A

WSU Selection Number or Cultivar	Type of Plant Species Provided	Type of Material Provided	Number of Authorized Plants of Each Cultivar Recipient is Allowed to Possess
WA 38	apple	budwood*	Unlimited

*Certified Virus-Free Plant Material