

INFORME PRELIMINAR INTERNACIONAL SOBRE LA PATENTABILIDAD

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2. Citas y explicaciones (Regla 70.7)

-----EXPLICACIÓN-----

Las reivindicaciones 1 a 14, 15/1, 15/13, 15/16/1, 15/16/13, 17/16/15/1, 17/16/15/13, 18/17116/15/1 y 18/17/16/15/13 carecen de una actividad inventiva con arreglo al artículo 33.3) del PCT, por ser evidentes en relación a Lindner (US 2010/0160168 A1) en vista de Formstone y otros (Formstone) (US 2007/0179077 A1).

De acuerdo con la reivindicación 1, Lindner revela un adyuvante agrícola líquido (formulaciones homogéneas de concentrado de agroquímicos líquidos estables; útiles como adyuvantes de mezcla de tanques; Resumen), que comprende: al menos un éster de alquilo (C_1 - C_8) de un ácido alquilo (C_{12} - C_{16}) (uso de ácido láurico, ácido mirístico y ácido palmítico, que todos constituyen ésteres de alquilo (C_1 - C_8) de un ácido alquilo (C_{12} - C_{16}); Párrafo [0053]); al menos un surfactante aniónico (Resumen; Párrafo [0020]; Reivindicaciones 3, 5); y al menos un surfactante no iónico (Resumen; Párrafo [0020]; Reivindicación 1); y en donde el al menos un éster de alquilo (C_1 - C_8) de un ácido de alquilo (C_{12} - C_{16}) (uso de ácido láurico, ácido mirístico, y ácido palmítico, que todos constituyen ésteres de alquilo (C_1 - C_8) de un ácido de alquilo (C_{12} - C_{16}); El párrafo [0053]) tiene una capacidad de disolución de cera parafínica de entre 2 a 20 % en peso a 25 grados C (cualquiera de los ésteres de alquilo (C_1 - C_8) de un ácido alquilo (C_{12} - C_{16}) divulgados posee necesariamente una capacidad de disolución de cera parafínica de entre 2 a 20% en peso a 25 grados C, ya que la estructura bien definida de cualquiera de ácido láurico, ácido mirístico y ácido palmítico, y su las propiedades intrínsecas son inseparables e inextricablemente ligadas; las propiedades particularmente deseables en estos concentrados incluyen la estabilidad al ambiente, típicamente cerca de 20 a 25 grados C; Párrafos [0015], [0053]). Lindner no revela en qué el adyuvante agrícola líquido tiene un punto de inflamación superior a unos 100 grados C. Formstone revela una composición agroquímica acuosa (Párrafo [0016]; Reivindicaciones 9 a 11), en las que un adyuvante agrícola líquido (párrafo [0049]; Reivindicaciones 9-11) tiene un punto de inflamación superior a unos 100 grados C (miristato de isopropilo, cocoato de butilo y laurato de butilo, todos los cuales tienen una densidad de 0,85 g/ml y un punto de inflamación superior a 100 grados C, son particularmente adecuados para su uso como disolventes en la presente invención; Párrafo [0044]). Habría sido obvio para una persona de habilidad ordinaria en el arte, en el momento de la invención, haber incorporado fácilmente un adyuvante agrícola líquido que comprende un punto de inflamación superior a aproximadamente 100 grados C, como se informó anteriormente por Formstone, dentro del adyuvante agrícola líquido que comprende al menos un éster de alquilo (C_1 - C_8) de un ácido de alquilo (C_{12} - C_{16}), como lo reveló previamente Lindner, para lograr e implementar un agroquímico soluble en agua (Formstone; Párrafo [0016]).

De acuerdo con la reivindicación 2, Lindner y Formstone, en combinación, revelan el adyuvante agrícola líquido de la reivindicación 1, y Lindner revela además en donde el al menos un éster de alquilo (C_1 - C_8) de un ácido de alquilo (C_{12} - C_{16}) (uso de ácido láurico, ácido mirístico y ácido palmítico, que constituyen ésteres de alquilo (C_1 - C_8) de un ácido de alquilo (C_{12} - C_{16}); Párrafo [0053]); al menos un surfactante aniónico (Resumen; Párrafo [0020]; las reivindicaciones 3, 5) tienen cada una de ellas un grupo de ésteres alquilo seleccionados del grupo formado por: ésteres metílicos (párrafo 0053), ésteres etílicos (párrafo (0053)), ésteres de propilo (párrafo [0053], ésteres de butilo, éster de isopropilo, éster de isobutilo, éster de isopentilo, ésteres de 2-etilhexilo (párrafo (0053)) y combinaciones de los mismos.

De acuerdo con la reivindicación 3, Lindner y Formstone, en combinación, revelan el adyuvante agrícola líquido de la Reivindicación 2, y Lindner revela además en donde el al menos un éster de alquilo (C_1 - C_8) de un ácido de alquilo (C_{12} - C_{16}) (uso de ácido láurico, ácido mirístico y ácido palmítico, que constituyen ésteres de alquilo (C_1 - C_8) de un ácido de alquilo (C_{12} - C_{16}); las reivindicaciones 1 a 14, 15/1, 15/13, 15/16/1, 15/16/13, 17/16/15/1, 17/16/15/13, 18/17116/15/1 y 18/17/16/15/13 carecen de una actividad inventiva con arreglo al artículo 33.3) del PCT, por ser evidentes en relación con Lindner (US 2010/0160168 A1) en vista de Formstone y otros (Formstone) (US2007/0179077 A1).

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El párrafo [0053]) se deriva de un ácido alquilo seleccionado del grupo formado por: ácido láurico (párrafo [0053]), ácido tridecílico, ácido mirístico (párrafo [0053]), ácido pentadecanóico, ácido palmítico (párrafo [0053]), y combinaciones de los mismos.

De acuerdo la reivindicación 4, Lindner y Formstone, en combinación, revelan el adyuvante agrícola líquido de la reivindicación 3, y Lindner revela además en donde el al menos un éster de alquilo (C_1 - C_8) de un ácido de alquilo (C_{12} - C_{16}) (uso de ácido láurico, ácido mirístico y ácido palmítico, que todos constituyen ésteres de alquilo (C_1 - C_8) de un ácido de alquilo (C_{12} - C_{16}); El párrafo [0053]) se selecciona del grupo formado por: laurato de isobutilo, laurato de isopentilo, laurato de metilo (párrafo [0053]), laurato de 2-etilhexilo (párrafo [0088]), palmitato de 2-etilhexilo (párrafo [0053]), laurato de isopropilo, miristato de isopropilo, palmitato de isopropilo y combinaciones de los mismos.

De acuerdo con la reivindicación 5, Lindner y Formstone, en combinación, revelan el adyuvante agrícola líquido de la reivindicación 1, y Lindner revela además en qué consiste en que al menos un surfactante aniónico se selecciona del grupo formado por: sales de ácido alquilo (C_6 - C_{18}) benceno sulfónico (párrafos [0068], [0069]), sulfonato de dodecibenceno de calcio, sulfonato de dodecibenceno sódico, alquilo(C_6 - C_{18}) benceno sulfonato de amina, dodecibenceno sulfonatos de trietanolamina, alquilo (C_6 - C_{18}) éter sulfatos, alquilo (C_6 - C_{18}) éter sulfatos etoxilado, alquilo (C_6 - C_{18}) sulfatos, lauril éter sulfato polietoxilado de sodio, alquilo (C_6 - C_{18}) fosfato ésteres, sulfatos alquilados(C_6 - C_{18}), fosfato ésteres alcoxilados (C_6 - C_{18}), sales de sulfonato de xileno, sales de sulfonato de cumeno y combinaciones de los mismos.

De acuerdo con la reivindicación 6, Lindner y Formstone, en combinación, revelan el coadyuvante agrícola líquido de la reivindicación 1, y Lindner revela además en qué consiste al menos un surfactante no iónico del grupo que consiste en: alcoholes grasos (C_8 - C_{22}) alcoxilados, alcoholes grasos (C_8 - C_{22}) etoxilados, alcoholes grasos (C_8 - C_{22}) propoxilados, alcoholes grasos (C_8 - C_{22}) etoxilados y propoxilados , alquil(C_4 - C_{10}) (poli)glucósidos de cadena recta (párrafo [0138]); y ésteres grasos de sorbitán alcoxilados (párrafo [0062]), ésteres grasos de sorbitol alcoxilados, ésteres grasos de sorbitán etoxilado, ésteres grasos de sorbitol etoxilados, monolaurato de sorbitán de polioxietileno, monopalmitato de sorbitán de polioxietileno, monosterato de sorbitán de polietileno y combinaciones de los mismos.

De acuerdo con la reivindicación 7, Lindner y Formstone, en combinación, revelan el adyuvante agrícola líquido de la reivindicación 6, y Lindner revela y ejemplifica el uso de alcohol etoxilado $C_{12/15}$ con un grado de etoxilación de 4 como surfactante no iónico (párrafos [135], [0166]).

De acuerdo con la reivindicación 8, Lindner y Formstone, en combinación, divulgan el adyuvante agrícola líquido de la reivindicación 1, y Lindner revela además que comprende un aditivo seleccionado del grupo que consiste en: conservantes (párrafo [0005]), clarificadores, agentes anticongelantes (párrafo [0005]), hidrótrofos (párrafo [0092]), estabilizadores (resumen), antioxidantes, acidificantes, quelatos (párrafo [0104]), agentes complejantes, colorantes, modificadores de reología, antiespumantes (párrafo [0049]) , anti deriva y agua, aceite (Resumen) u otros disolventes (párrafo [0051]), y combinaciones de los mismos.

De acuerdo con la reivindicación 9, Lindner y Formstone, en combinación, revelan el adyuvante agrícola líquido de la reivindicación 1, y Lindner revela además en donde el al menos un éster de alquilo (C_1 - C_8) de un ácido de alquilo (C_{12} - C_{16}) (uso de ácido láurico, ácido mirístico y ácido palmítico, que todos constituyen ésteres de alquilo (C_1 - C_8) de un ácido de alquilo (C_{12} - C_{16}); El párrafo [0053]) está presente en una cantidad de entre aproximadamente 0,1% en peso y aproximadamente 30% en peso (presente en una cantidad, en particular del 10 al 35 % en peso de la composición total del concentrado; Párrafos [0053], [0054]), en el que al menos un surfactante aniónico (Resumen; Párrafo [0020]); Reivindicaciones 3, 5) está presente en una cantidad de entre aproximadamente 1 % en peso a aproximadamente 50% en peso (de 1 a 25% en peso de un surfactante; Resumen; Párrafos [0005], [0020]; Reivindicaciones 3, 5, 7), y en donde al menos un surfactante no iónico (Resumen; Párrafo [0020]; La reivindicación 1) está presente en una cantidad de entre aproximadamente 1% en peso a aproximadamente 50 % peso (de 1 a 25% en peso de un surfactante; Resumen; Párrafos [0005], [0020]; Reivindicaciones 3, 5, 7).

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De acuerdo con la reivindicación 10, Lindner y Formstone, en combinación, revelan el adyuvante agrícola líquido de la reivindicación, y Lindner revela además en donde el al menos un éster de alquilo ($C_1 - C_8$) de un ácido de alquilo ($C_{12} - C_{16}$) (uso de ácido láurico, ácido mirístico y ácido palmítico, que todos constituyen ésteres de alquilo ($C_1 - C_8$) de un ácido de alquilo ($C_{12} - C_{16}$); El párrafo [0053]) está presente en una cantidad de entre aproximadamente 2 % en peso y aproximadamente 15 % en peso (presentes en un importe comprendido entre el 0,5 % y el 50 % en peso de la composición total del concentrado; Párrafos [0053], [0054]), en los que al menos un surfactante aniónico (Resumen; Párrafo [0020]; Reivindicaciones 3, 5) está presente en una cantidad de entre aproximadamente 3% en peso a aproximadamente 20% en peso (de 1 a 25% en peso de un surfactante; Resumen; (presentes en un importe comprendido entre el 0,5 % y el 50 % en peso de la composición total del concentrado; Párrafos [0053], [0054]), en los que al menos un surfactante aniónico (Resumen; Párrafo [0020]; Reivindicaciones 3, 5) está presente en una cantidad de entre aproximadamente 3% en peso a aproximadamente 20% en peso (de 1 a 25% en peso de un surfactante; Resumen; Párrafos [0005], [0020]; Reivindicaciones 3, 5, 7), y en donde al menos un surfactante no iónico (Resumen; Párrafo [0020]; La reivindicación 1) está presente en una cantidad de entre aproximadamente 5 % en peso y aproximadamente 30 % en peso (de 1 a 40% en peso de un surfactante; Resumen; Párrafos [0005], [0020]; Reivindicaciones 3, 5, 7).

De acuerdo con la reivindicación 11, Lindner y Formstone, en combinación, revelan el adyuvante agrícola líquido de la reivindicación 1, y Lindner revela además que comprende agua (Resumen) y/u otros aditivos (Resumen), en el que el adyuvante agrícola líquido comprende de aproximadamente 0,1 % en peso a 20 % en peso (presente en una cantidad comprendida entre el 0,5 % y el 50 % en peso de la composición total del concentrado; Párrafos [0053], [0054]) de al menos un éster de alquilo ($C_1 - C_8$) de un ácido de alquilo ($C_{12} - C_{16}$) (uso de ácido láurico, ácido mirístico y ácido palmítico, que todos constituyen ésteres de alquilo ($C_1 - C_8$) de un ácido de alquilo ($C_{12} - C_{16}$); Párrafo [0053]); y aproximadamente 1 % en peso a 50 % en peso (presente en una cantidad de 0,5 a 50 % en peso de la composición total de concentrados; Párrafos [0053], [0054]) del al menos un surfactante aniónico (Resumen; Párrafo [0020]; Reivindicaciones 3, 5), y acerca de 1 % en peso a 50 % en peso (de 1 a 40 % en peso de un surfactante; Resumen; Párrafos [0005], [0020]; Reivindicaciones 3, 5, 7) del al menos un surfactante no iónico (Resumen; Párrafo [0020]; Reivindicación 1), y 2 % en peso a 80 % en peso del agua (de 20 a 60% en peso de agua: Resumen; Reivindicación 7) y/u otros aditivos.

De acuerdo con la reivindicación 12, Lindner y Formstone, en combinación, revelan el adyuvante agrícola líquido de la reivindicación 1, y Lindner revela además en qué consiste al menos un éster de alquilo ($C_1 - C_8$) de un ácido de alquilo ($C_{12} - C_{16}$) (uso de ácido láurico, ácido mirístico y ácido palmítico, que todos constituyen ésteres de alquilo ($C_1 - C_8$) de un ácido de alquilo ($C_{12} - C_{16}$); El párrafo [0053]) está presente en una cantidad comprendida entre el 0,1 % en peso y aproximadamente el 20 % en peso (presente en una cantidad comprendida entre el 0,5 % y el 50 % en peso de la composición total del concentrado; Párrafos [0053], [0054]), preferiblemente entre aproximadamente 2 % en peso y aproximadamente 15 % en peso (presente en una cantidad comprendida entre el 0,5 % y el 50 % en peso de la composición total del concentrado; Párrafos [0053], [0054]); en donde al menos un surfactante aniónico (Resumen; Párrafo [0020]; Reivindicaciones 3, 5) está presente en una cantidad de entre aproximadamente 3 en peso. % a 20 % en peso (de 1 a 25 % en peso de un surfactante; Resumen; Párrafos [0005], [0020]; Reivindicaciones 3, 5 y 7); y en donde el al menos un surfactante no iónico (Resumen; Párrafo [0020]; La reivindicación 1) está presente en una cantidad de entre aproximadamente 5 % en peso a aproximadamente 30 % en peso (de 1 a 40% en peso de un surfactante; Resumen; Párrafos [0005], [0020]; Reivindicaciones 3, 5 y 7); y en donde el al menos un éster de alquilo ($C_1 - C_8$) de un ácido de alquilo ($C_{12} - C_{16}$) (uso de ácido láurico, ácido mirístico y ácido palmítico, que todos constituyen ésteres de alquilo ($C_1 - C_8$) de un ácido de alquilo ($C_{12} - C_{16}$); Párrafo [0053]) se selecciona del grupo que consiste en: laurato de isobutilo, laurato de isopentilo, laurato de metilo (Párrafo [0053]), laurato de 2-etilhexilo (Párrafo [0088]), laurato de 2-etilhexilo (Párrafo [0088]), palmitato de 2-etilhexilo (párrafo [0053]), laurato de isopropilo, miristato de isopropilo, palmitato de isopropilo y combinaciones de los mismos; y en el que al menos un surfactante aniónico (Resumen; Párrafo [0020]; Las reivindicaciones 3, 5) se seleccionan del grupo formado por: sales de ácido alquilo ($C_6 - C_{18}$) benceno sulfónico (párrafos [0068], [0069]), sulfonato de dodecibenceno de calcio, sulfonato de dodecibenceno sódico, alquilo ($C_6 - C_{18}$) benceno sulfonato de amina, dodecibenceno sulfonatos de trietanolamina, alquilo ($C_6 - C_{18}$) éter sulfatos, alquilo ($C_6 - C_{18}$) éter sulfatos etoxilado, alquilo ($C_6 - C_{18}$) sulfatos, lauril éter sulfato polietoxilado de sodio, alquilo ($C_6 - C_{18}$) fosfato ésteres, sulfatos alquilados ($C_6 - C_{18}$), fosfato ésteres alcóxilados ($C_6 - C_{18}$), sales de sulfonato de xileno, sales de sulfonato de cumeno y combinaciones de los mismos; y

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en donde al menos un surfactante no iónico (Resumen; Párrafo [0020]; La reivindicación 1) se selecciona del grupo formado por: alcoholes grasos ($C_8 - C_{22}$) alcoxilados, alcoholes grasos ($C_8 - C_{22}$) etoxilados, alcoholes grasos ($C_8 - C_{22}$) propoxilados, alcoholes grasos ($C_8 - C_{22}$) etoxilados y propoxilados, alquil($C_4 - C_{10}$) (poli)glucósidos de cadena recta (párrafo [0138]); y ésteres grasos de sorbitán alcoxilados (párrafo [0062]), ésteres grasos de sorbitol alcoxilados, ésteres grasos de sorbitán etoxilado, ésteres grasos de sorbitol etoxilados, monolaurato de sorbitán de polioxietileno, monopalmitato de sorbitán de polioxietileno, monosterato de sorbitán de polietileno y combinaciones de los mismos.

De acuerdo con la reivindicación 13, Lindner y Formstone, en combinación, revelan el adyuvante agrícola líquido de la reivindicación 12, y Lindner revela además el agua (Resumen) y/u otros aditivos, en los que el adyuvante agrícola líquido (formulaciones homogéneas estables de concentrado de agroquímicos líquidos: útiles como adyuvantes de mezcla en tanque; Resumen) comprende desde aproximadamente 0,1 % en peso a 20 % en peso (presente en una cantidad de 0,5 a 50 % en peso de la composición total del concentrado; Párrafos [0053], [0054]) del al menos un éster de alquilo ($C_1 - C_8$) de un ácido de alquilo ($C_{12} - C_{16}$) (uso de ácido láurico, ácido mirístico y ácido palmítico, que constituyen ésteres de alquilo ($C_1 - C_8$) de un ácido de alquilo ($C_{12} - C_{16}$); Párrafo [0053]); y alrededor de 1 % en peso a 50 % en peso (de 1 a 25% en peso de un surfactante; Resumen; Párrafos [0005], [0020]; Reivindicaciones 3, 5, 7) del al menos un surfactante aniónico (Resumen; Párrafo [0020]; Reivindicaciones 3, 5), y aproximadamente 1 % en peso a 50 % en peso (de 1 a 25% en peso de un surfactante; Resumen; Párrafos [0005], [0020]; Reivindicaciones 3, 5, 7) de al menos uno surfactante no iónico (Resumen; Párrafo [0020]; Reivindicación 1), y del 2 al 80 % en peso (del 20 al 60 % en peso de agua; Resumen; Reivindicación 7) del agua (Resumen) u otros aditivos.

De acuerdo con la reivindicación 14, Lindner y Formstone, en combinación, divulgan el adyuvante agrícola líquido de la reivindicación 13, y Lindner revela además que comprende un aditivo seleccionado del grupo que consiste en: conservantes (párrafo [0005]), clarificadores, agentes anticongelantes (párrafo [0005]), hidrótrofos (párrafo [0092]), estabilizadores (resumen), antioxidantes, acidificantes, quelatos (párrafo [0104]), agentes complejantes, colorantes, modificadores de reología, antiespumantes (párrafo [0049]), anti deriva y agua, aceite (Resumen) u otros disolventes (párrafo [0051]), y combinaciones de los mismos.

De acuerdo con las reivindicaciones 15/1 y 15/13, Lindner y Formstone, en combinación, revelan el concentrado adyuvante preparado de acuerdo con la reivindicación 1 o la reivindicación 13, y Lindner revela además un método para diluir un adyuvante agrícola líquido (formulaciones homogéneas de concentrado líquido de agroquímicos estables que forman diluciones estables con agua; Resumen), que comprende: dilución de la concentración adyuvante preparada con agua (formulaciones homogéneas de concentrado de agroquímicos líquidos estables que forman diluciones estables con agua; Resumen) en una proporción en peso de adyuvante agrícola líquido a agua 1:5000 a 1:10 (diluir un concentrado con de 1 a 10.000 partes de agua por parte de concentrado; Párrafo [0041]; Reivindicaciones 9, 10) para producir una emulsión diluida estable (párrafo [0050]) y/o micro emulsión (párrafo [0050]).

De acuerdo con las reivindicaciones 16/15/1 y 16/15/13, Lindner y Formstone, en combinación, revelan el método de las reivindicaciones 15/1 y 15/13, y Lindner revela en qué el agua contiene además al menos un compuesto agrícola (párrafo [0126]) seleccionado del grupo formado por: insecticidas (párrafo [0126]), fungicidas (párrafo [0126]), herbicidas (párrafo [0126]), desecantes, defoliantes, acaricidas, nutrientes (resumen), miticidas, bactericidas, biocidas, biocidas, ovicidas, nematocidas, reguladores del crecimiento de insectos, reguladores del crecimiento de las plantas (párrafo [0126]) y combinaciones de los mismos.

De acuerdo con las reivindicaciones 17/16/15/1 y 17/16/15/13, Lindner y Formstone, en combinación, revelan el método de cualquiera de las Reivindicaciones 16/15/1 y 16/15/13, y Lindner revela además en qué consiste en que el adyuvante agrícola líquido se diluye en un tanque de mezcla (Resumen), un tanque de pulverización (Resumen; Párrafos Reivindicaciones 8 a 10), un contenedor o un sistema de riego en línea.

De acuerdo con las Reivindicaciones 18/17/16/15/1 y 18/17/16/15/13, Lindner y Formstone, en combinación, divulgue el método de cualquiera de las reivindicaciones 17/16/15/1 y 17/16/15/13, y Lindner revele además en qué consiste la emulsión diluida estable (párrafo [0050]) y/o micro emulsión (párrafo [0050]) en al menos un miembro del grupo formado por: plantas (párrafo [0022]; reivindicaciones 2, 10), las manzanas (párrafos [0042], [0043]), semillas, suelo (párrafo [0043]; Reivindicación 10), lugares urbanos y bosques, a través de un aparato seleccionado del grupo

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que comprende: pulverizadores asistidos por aire, pulverizadores convencionales (Resumen; Párrafos [0041 [0043]), equipos de volúmenes ultrabajos como equipos aéreos, electrostáticos, fumigación y nebulización y sistemas de quimigación, pivotes, aspersores y combinaciones de los mismos

Respuesta a los argumentos del solicitante

(1) El solicitante argumenta que una característica esencial de Lindner es el electrolito acuoso concentrado, y uno de habilidad ordinaria en el arte viendo las enseñanzas de Lindner concluiría que tal electrolito acuoso concentrado debe estar presente en cualquier composición basada en Lindner. El solicitante señala que las reivindicaciones inmediatas no incluyen ningún electrolito acuoso concentrado De acuerdo con las enseñanzas de Lindner. El solicitante argumenta que cualquier combinación de Lindner con las referencias secundarias del estado de la técnica siempre requerirá la inclusión del concentrado de electrolito acuoso, y como tal nunca dará lugar a la invención reivindicada. El solicitante argumenta que la enseñanza expresa y necesaria del concentrado de electrolito acuoso de Lindner enseña lejos de una invención que carece de esta característica esencial.

Con respecto al **argumento del solicitante (1)**, el argumento transversal no se encuentra persuasivo. A pesar de que la composición de Lindner incluye componentes adicionales que no se recitan en la invención de la solicitud instantánea (por ejemplo, electrolito acuoso concentrado), no es una "enseñanza ausente" debido a la recitación "que comprende" en las reivindicaciones instantáneas. El término de transición "que comprende" es de composición abierta y no excluye elementos adicionales no recitados en los pasos de método. **Nota: MPEP 2111.03.**

(2) El solicitante argumenta que la persona experta en la técnica no puede, y no esperaría, razonablemente que una combinación de un producto químico que tiene un punto de inflamación superior a aproximadamente 100°C junto con otros productos químicos donde no hay enseñanza de ningún punto de inflamación daría lugar a un coadyuvante en el que el punto de inflamación se ha mantenido más alto que aproximadamente 100°C. Por lo tanto, el solicitante argumenta que ninguna combinación de Lindner y Formstone llegará a la invención reivindicada instantáneamente.

Con respecto al **argumento del solicitante (2)**, el argumento transversal no se encuentra persuasivo. La formulación de las enseñanzas combinadas de Lindner y Formstone revelan una composición que comprende los componentes reclamados. Lindner revela que éster de ácidos grasos C_{12} - C_{18} , tales como ésteres alquilo de ácido mirístico, puede ser utilizado como el componente del aceite. Formstone revela el uso de miristato isopropílico, que tiene un punto de inflamación superior a 100°C. Uno con los conocimientos ordinarios en el arte habría sido motivado para utilizar un disolvente con un punto de inflamación más alto, como isopropilo miristato, porque los disolventes de punto de inflamación más bajo se divulgan como que requieren sistemas especiales de manipulación y seguridad.

La composición de las enseñanzas combinadas de Lindner y Formstone se superpone con los componentes utilizados en el ejemplo ORO-009 K de la especificación instantánea, que se reveló que tiene un punto de inflamación de mayor que 100°C. Por lo tanto, a falta de pruebas de lo contrario, la composición de las enseñanzas combinadas se esperaría que Lindner y Formstone tuvieran un punto de inflamación superior a 100°C. Además, uno de los conocimientos ordinarios en la técnica habría sido motivado para proporcionar una composición con un punto de inflamación más alto con el fin de reducir los sistemas de manipulación y seguridad adicionales requeridos por las composiciones de punto de inflamación más bajos.

(3) El solicitante alega que el párrafo 0126 de Xu revela únicamente la etoxilación y la propoxilación de los alcoxilados de bloque PO-EO, y que no existe ninguna enseñanza, sugerencia o motivación por parte de Xu para etoxilar nada que no sea el bloque PO-EO etoxilados.

Con respecto al **argumento del solicitante (3)**, el rechazo de la reivindicación 7 se ha modificado para incluirlo con el rechazo sobre Lindner y Formstone. Como se discutió anteriormente, Lindner revela y ejemplifica el uso de un alcohol graso etoxilado $C_{12/15}$ con un grado de etoxilación de 4 (OSS3) como el surfactante no iónico (Lindner párrafos [0135], [0166]).

PATENT COOPERATION TREATY

From the INTERNATIONAL PRELIMINARY EXAMINING
AUTHORITY

To:

**CHARL GUILLAUME MARAIS
ORO AGRI GROUP INTELLECTUAL
PROPERTY MANAGER AND R**

**2788 S. MAPLE AVENUE
FRESNO, CALIFORNIA 93725
UNITED STATES OF AMERICA**

PCT

NOTIFICATION OF TRANSMITTAL OF
INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY (CHAPTER II OF
THE PATENT COOPERATION TREATY)

(PCT Rule 71.1)

Date of mailing (day/month/year) 12 July 2021 (12.07.2021)	
Applicant's or agent's file reference P18PC	IMPORTANT NOTIFICATION
International application No. PCT/IB2020/050113	International filing date (day/month/year) 08 January 2020 (08.01.2020)
	Priority date (day/month/year) 08 January 2019 (08.01.2019)
Applicant ORO AGRI INC.	

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the *PCT Applicant's Guide*.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed invention is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the IPEA/US COMMISSIONER FOR PATENTS MAIL STOP PCT, ATTN: IPEA/US P.O. BOX 1450 ALEXANDRIA, VA 22313-1450, UNITED STATES OF AMERICA	Authorized officer MONICA A. SHIN
Facsimile No. (571)273-8300	Telephone No. (571)272-7138

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P18PC	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/IB2020/050113	International filing date (<i>day/month/year</i>) 08 January 2020 (08.01.2020)	Priority date (<i>day/month/year</i>) 08 January 2019 (08.01.2019)
International Patent Classification (IPC) or both national classification and IPC IPC: A01N 25/04, 25/02, 25/00 CPC: A01N 25/04, 25/02, 25/00		
Applicant ORO AGRI INC.		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 9 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:

- a. ☐ (*sent to the applicant and to the International Bureau*) a total of _____ sheets, as follows:
- ☐ sheets of the description, claims and/or drawings which have been amended and/or sheets containing rectifications authorized by this Authority, unless those sheets were superseded or cancelled, and any accompanying letters (see Rules 46.5, 66.8, 70.16, 91.2, and Section 607 of the Administrative Instructions).
- ☐ sheets containing rectifications, where the decision was made by this Authority not to take them into account because they were not authorized by or notified to this Authority at the time when this Authority began to draw up this report, and any accompanying letters (Rules 66.4bis, 70.2(e), 70.16 and 91.2).
- ☐ superseded sheets and any accompanying letters, where this Authority either considers that the superseding sheets contain an amendment that goes beyond the disclosure in the international application as filed, or the superseding sheets were not accompanied by a letter indicating the basis for the amendments in the application as filed, as indicated in item 4 of Box No. I and the Supplemental Box (see Rule 70.16(b)).
- b. ☐ (*sent to the International Bureau only*) a total of (indicate type and number of electronic carrier(s)) _____ containing a sequence listing, in the form of an Annex C/ST.25 text file, as indicated in the Supplemental Box Relating to Sequence Listing (see paragraph 3ter of Annex C of the Administrative Instructions).

4. This report contains indications relating to the following items:

- ☒ Box No. I Basis of the report
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

Date of submission of the demand 08 November 2020 (08.11.2020)	Date of completion of this report 30 June 2021 (30.06.2021)
Name and mailing address of the IPEA/US COMMISSIONER FOR PATENTS MAIL STOP PCT, ATTN: IPEA/US P.O. BOX 1450 ALEXANDRIA, VA 22313-1450, UNITED STATES OF AMERICA	Authorized officer MONICA A. SHIN
Facsimile No. (571)273-8300	Telephone No. (571)272-7138

Form PCT/IPEA/409 (cover sheet) (January 2015)

Box No. I Basis of the report

1. With regard to the **language**, this report is based on:

- ☒ the international application in the language in which it was filed.
- ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of:
- ☐ international search (Rules 12.3(a) and 23.1(b))
- ☐ publication of the international application (Rule 12.4(a))
- ☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a) and (b))

2. With regard to the **elements** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

- ☒ the international application as originally filed/furnished, or
- ☒ the description:
pages **1-27** as originally filed/furnished.
pages* _____ received by this Authority on _____
pages* _____ received by this Authority on _____
- ☒ the claims:
Nos. **1-18** as originally filed/furnished.
Nos.* _____ as amended (together with any statement) under Article 19
Nos.* _____ received by this Authority on _____
- ☐ the drawings:
pages _____ as originally filed/furnished.
pages* _____ received by this Authority on _____
pages* _____ received by this Authority on _____
- ☐ a sequence listing - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since either they are considered to go beyond the disclosure as filed, or they were not accompanied by a letter indicating the basis for the amendments in the application as filed, as indicated in the Supplemental Box (Rules 70.2(c) and (c-bis)):

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____

5. ☐ This report has been established:

- ☐ taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rules 66.1(d-bis) and 70.2(e)).
- ☐ without taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91(Rules 66.4bis and 70.2(e)).

6. With regard to top-up searches (Rules 66.1ter and 70.2(f)):

- ☐ A top-up search was carried out by this Authority on _____
- ☐ Additional relevant documents have been discovered during the top-up search.
- ☒ No top-up search was carried out by this Authority because it would serve no useful purpose.

7. ☐ Supplementary international search report(s) from Authority(ies) _____ has/have been received and taken into account in establishing this report (Rule 45bis.8(b) and (c)).

* If item 4 applies, some or all of those sheets may be marked "superseded."

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement		
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1. Statement

Novelty (N)	Claims	1-18	YES
	Claims	None	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-18	NO
Industrial applicability (IA)	Claims	1-18	YES
	Claims	None	NO

2. Citations and explanations (Rule 70.7)

----- EXPLANATION -----

Claims 1-14, 15/1, 15/13, 16/15/1, 16/15/13, 17/16/15/1, 17/16/15/13, 18/17/16/15/1 and 18/17/16/15/13 lack an inventive step under PCT Article 33(3) as being obvious over Lindner (US 2010/0160168 A1) in view of Formstone et al. (Formstone) (US 2007/0179077 A1).

As per claim 1, Lindner discloses a liquid agricultural adjuvant (homogenous stable liquid agrochemical concentrate formulations; useful as tank mix adjuvants; Abstract), comprising: at least one alkyl (C1 -C8) ester of an alkyl (C12 - C16) acid (use of lauric acid, myristic acid, and palmitic acid, which all constitute alkyl (C1 - C8) esters of an alkyl (C12- C16) acid; Paragraph [0053]); at least one anionic surfactant (Abstract; Paragraph [0020]; Claims 3, 5); and at least one nonionic surfactant (Abstract; Paragraph [0020]; Claim 1); and wherein the at least one alkyl (C1 -C8) esters of alkyl (C12 - C16) acid (use of lauric acid, myristic acid, and palmitic acid, which all constitute alkyl (C1 - C8) esters of an alkyl (C12 - C16) acid; Paragraph [0053]) has a paraffinic wax dissolution capability of between 2 to 20 wt. % at 25 degrees C (any of the disclosed alkyl (C1 - C8) esters of an alkyl (C12 -C16) acid necessarily possess a paraffinic wax dissolution capability of between 2 to 20 wt. % at 25 degrees C, since the well-defined structure of any of lauric acid, myristic acid, and palmitic acid, and their intrinsic properties are inseparable and inextricability-linked; particularly desirable properties sought in these concentrates include stability under ambient, typically about 20 to 25 degrees C; Paragraphs [0015], [0053]). Lindner does not disclose wherein the liquid agricultural adjuvant has a flash point higher than about 100 degrees C. Formstone discloses an aqueous agrochemical composition (Paragraph [0016]; Claims 9-11), wherein a liquid agricultural adjuvant (Paragraph [0049]; Claims 9-11) has a flash point higher than about 100 degrees C (isopropyl myristate, butyl cocoate and butyl laurate, all of which have a density of 0.85 g/ml and a flash point greater than 100 degrees C, are particularly suitable for use as solvents in the present invention; Paragraph [0044]). It would have been obvious to a person of ordinary skill in the art, at the time of the invention, to have readily incorporated liquid agricultural adjuvant comprising a flash point higher than about 100 degrees C, as previously disclosed by Formstone, within the liquid agricultural adjuvant comprising at least one alkyl (C1 - C8) ester of an alkyl (C12- C16) acid, as previously disclosed by Lindner, for achieving and implementing a water-soluble agrochemical (Formstone; Paragraph [0016]).

As per claim 2, Lindner and Formstone, in combination, disclose the liquid agricultural adjuvant of claim 1, and Lindner further discloses wherein the at least one alkyl (C1 - C8) ester of an alkyl (C12 - C16) acid (use of lauric acid, myristic acid, and palmitic acid, which all constitute alkyl (C1 - C8) esters of an alkyl (C12 - C16) acid; Paragraph [0053]); at least one anionic surfactant (Abstract; Paragraph [0020]; Claims 3, 5) each have an alkyl ester group selected from the group consisting of: methyl esters (Paragraph 0053), ethyl esters (Paragraph (0053)), propyl esters (Paragraph [0053], butyl esters, isopropyl ester, isobutyl ester, isopentyl ester, 2-ethylhexyl esters (Paragraph (0053)), and combinations thereof.

As per claim 3, Lindner and Formstone, in combination, disclose the liquid agricultural adjuvant of claim 2, and Lindner further discloses wherein the at least one alkyl (C1 -C8) ester of an alkyl (C12- C16) acid (use of lauric acid, myristic acid, and palmitic acid, which all constitute alkyl (C1 - C6) esters of an alkyl

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
	(C12-C16) acid; Paragraph [0053]) is derived from an alkyl acid selected from the group consisting of: lauric acid (Paragraph [0053]), tridecyl acid, myristic acid (Paragraph [0053]), pentadecanoic acid, palmitic acid (Paragraph [0053]), and combinations thereof. As per claim 4, Lindner and Formstone, in combination, disclose the liquid agricultural adjuvant of claim 3, and Lindner further discloses wherein the at least one alkyl (C1 - C8) ester of an alkyl (C12 - C16) acid (use of lauric acid, myristic acid, and palmitic acid, which all constitute alkyl (C1 - C8) esters of an alkyl (C12-C16) acid; Paragraph [0053]) is selected from the group consisting of: isobutyl laurate, isopentyl laurate, methyl laurate (Paragraph [0053]), 2-ethylhexyl laurate (Paragraph [0088]), 2-ethylhexyl palmitate (Paragraph [0053]), isopropyl laurate, isopropyl myristate, isopropyl palmitate, and combinations thereof. As per claim 5, Lindner and Formstone, in combination, disclose the liquid agricultural adjuvant of claim 1, and Lindner further discloses wherein the at least one anionic surfactant is selected from the group consisting of: (C6 - C18) alkyl benzene sulfonic acid salts (Paragraphs [0068], [0069]), calcium dodecylbenzene sulfonate, sodium dodecylbenzene sulfonate, amine (C6 - C18) alkyl benzene sulfonate, triethanolamine dodecylbenzene sulfonates, (C6 - C18) alkyl ether sulfates, (C6 - C18) alkyl ethoxylated ether sulfates, (C6 - C18) alkyl sulfates, lauryl ether polyethoxylated sodium sulfate, (C6 - C8) alkyl phosphate esters, (C6 - C18) alkoxylated sulfates, (C6 - C18) alkoxylated phosphate esters, xylene sulfonate salts, cumene sulfonate salts and combinations thereof. As per claim 6, Lindner and Formstone, in combination, disclose the liquid agricultural adjuvant of claim 1, and Lindner further discloses wherein the at least one nonionic surfactant is selected from the group consisting of: (C8 - C22) alkoxylated fatty alcohols, (C8 - C22) ethoxylated fatty alcohols, (C8 - C22) propoxylated fatty alcohols, (C8 - C22) ethoxylated and propylated fatty alcohols, straight chain (C4 - C10) alkyl(poly)glycosides (Paragraph [0138]); and alkoxylated sorbitan fatty esters (Paragraph [0062]), alkoxylated sorbitol fatty esters, ethoxylated sorbitan fatty esters, ethoxylated sorbitol fatty esters, polyoxyethylene sorbitan monolaurate, polyoxyethylene sorbitan monopalmitate, polyethylene sorbitan monosterate, and combinations thereof. As per claim 7, Lindner and Formstone, in combination, disclose the liquid agricultural adjuvant of claim 6, and Lindner discloses and exemplifies the use of ethoxylated C12/15 alcohol having a degree of ethoxylation of 4 as the nonionic surfactant (para.0135, 0166). As per claim 8, Lindner and Formstone, in combination, disclose the liquid agricultural adjuvant of claim 1, and Lindner discloses further comprising an additive selected from the group consisting of: preservatives (Paragraph [0005]), clarifiers, anti-freezing agents (Paragraph [0005]), hydrotropes (Paragraph [0092]), stabilizers (Abstract), antioxidants, acidifiers, chelates (Paragraph [0104]), complexing agents, dyes, rheology modifiers, antifoams (Paragraph [0049]), anti-drift and water, oil (Abstract) or other solvents (Paragraph [0051]), and combinations thereof. As per claim 9, Lindner and Formstone, in combination, disclose the liquid agricultural adjuvant of claim 1, and Lindner further discloses wherein the at least one alkyl (C1-C8) ester of an alkyl (C12-C16) acid (use of lauric acid, myristic acid, and palmitic acid, which all constitute alkyl (C1-C8) esters of an alkyl (C12-C16) acid; Paragraph [0053]) is present in an amount of between about 0.1 wt. % to about 30 wt. % (present in an amount, particularly 10 to 35 % by weight of the total concentrate composition; paragraphs [0053], [0054]), wherein the at least one anionic surfactant (Abstract; Paragraph [0020]; Claims 3, 5) is present in an amount of between about 1 wt. % to about 50 wt. % (from 1 to 25% by weight of a surfactant; Abstract; Paragraphs [0005], [0020]; Claims 3, 5, 7), and wherein the at least one nonionic surfactant (Abstract; Paragraph [0020]; Claim 1) is present in an amount of between about 1 wt. % to about 50 wt. % (from 1 to 25% by weight of a surfactant; Abstract; Paragraphs [0005], [0020]; Claims 3, 5, 7). As per claim 10, Lindner and Formstone, in combination, disclose the liquid agricultural adjuvant of claim 9, and Lindner further discloses wherein the at least one alkyl (C1 - C8) ester of an alkyl (C12 - C16) acid (use of lauric acid, myristic acid, and palmitic acid, which all constitute alkyl (C1 - C8) esters of an alkyl (C12 - C16) acid; Paragraph [0053]) is present in an amount of between about 2 wt. % to about 15 wt. % (present in an amount from 0.5 to 50 % by weight of the total concentrate composition; Paragraphs [0053], [0054]), wherein the at least one anionic surfactants (Abstract; Paragraph [0020]; Claims 3, 5) is present in an amount of between about 3 wt. % to about 20 wt. % (from 1 to 25% by weight of a surfactant; Abstract;

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
	Paragraphs [0005], [0020]; Claims 3, 5, 7), and wherein the at least one nonionic surfactant (Abstract; Paragraph [0020]; Claim 1) is present in an amount of between about 5 wt. % to about 30 wt. % (from 1 to 40% by weight of a surfactant; Abstract; Paragraphs [0005], [0020]; Claims 3, 5, 7). As per claim 11, Lindner and Formstone, in combination, disclose the liquid agricultural adjuvant of claim 1, and Lindner discloses further comprising water (Abstract) and/or other additives (Abstract), wherein the liquid agricultural adjuvant comprises from about 0.1 wt. % to 20 wt.% (present in an amount from 0.5 to 50 % by weight of the total concentrate composition; Paragraphs [0053], [0054]) of the at least one alkyl (C1 - C8) ester of an alkyl (C12 - C16) acid (use of lauric acid, myristic acid, and palmitic acid, which all constitute alkyl (C1 - C8) esters of an alkyl (C12 - C16) acid; Paragraph [0053]); and about 1 wt.% to 50 wt.% (present in an amount from 0.5 to 50 % by weight of the total concentrate composition; Paragraphs [0053], [0054]) of the at least one anionic surfactant (Abstract; Paragraph [0020]; Claims 3, 5), and about 1 wt. % to 50 wt.% (from 1 to 40% by weight of a surfactant; Abstract; Paragraphs [0005], [0020]; Claims 3, 5, 7) of the at least one nonionic surfactant (Abstract; Paragraph [0020]; Claim 1), and 2 wt. % to 80 wt. % of the water (from 20 to 60% by weight of water: Abstract; Claim 7) and/or other additives. As per claim 12, Lindner and Formstone, in combination, disclose the liquid agricultural adjuvant of claim 1, and Lindner further discloses wherein the at least one alkyl (C1-C8) ester of an alkyl (C12-C16) acid (use of lauric acid, myristic acid, and palmitic acid, which all constitute alkyl (C1-C8) esters of an alkyl (C12-C16) acid; Paragraph [0053]) is present in an amount of between 0.1 wt.% and about 20 wt. % (present in an amount from 0.5 to 50 % by weight of the total concentrate composition; Paragraphs [0053], [0054]), preferably between about 2 wt.% to about 15 wt. % (present in an amount from 0.5 to 50 % by weight of the total concentrate composition; Paragraphs [0053], [0054]); wherein the at least one anionic surfactant (Abstract; Paragraph [0020]; Claims 3, 5) is present in an amount of between about 3 wt. % to about 20 wt. % (from 1 to 25% by weight of a surfactant; Abstract; Paragraphs [0005], [0020]; Claims 3, 5, 7); and wherein the at least one nonionic surfactant (Abstract; Paragraph [0020]; Claim 1) is present in an amount of between about 5 wt. % to about 30 wt. % (from 1 to 40% by weight of a surfactant; Abstract; Paragraphs [0005], [0020]; Claims 3, 5, 7); and wherein the at least one alkyl (C1 - C8) ester of an alkyl (C12- C16) acid (use of lauric acid, myristic acid, and palmitic acid, which all constitute alkyl (C1 - C8) esters of an alkyl (C12 - C16) acid; Paragraph [0053]) is selected from the group consisting of: isobutyl laurate, isopentyl laurate, methyl laurate (Paragraph [0053]), 2-ethylhexyl laurate (Paragraph [0088]), 2-ethylhexyl laurate (Paragraph [0088]), 2-ethylhexyl palmitate (Paragraph [0053]), isopropyl laurate, isopropyl myristate, isopropyl palmitate, and combinations thereof; and wherein the at least one anionic surfactant (Abstract; Paragraph [0020]; Claims 3, 5) is selected from the group consisting of: (C6-18) alkyl benzene sulfonic acid salts (Paragraphs [0068], [0069]), calcium dodecylbenzene sulfonate, sodium dodecylbenzene sulfonate, amine (C6 -C18) alkyl benzene sulfonate, triethanolamine dodecylbenzene sulfonates, (C6 -C18) alkyl ether sulfates, (C6 - C18) alkyl ethoxylated ether sulfates, (C6-C18) alkyl sulfates, lauryl ether polyethoxylated sodium sulfate, (C6-C18) alkyl phosphate esters, (C6- C18) alkoxyated sulfates, (C6 - C18) alkoxyated phosphate esters, xylene sulfonate salts, cumene sulfonate salts and combinations thereof; and wherein the at least one nonionic surfactant (Abstract; Paragraph [0020]; Claim 1) is selected from the group consisting of: (C8 - C22) alkoxyated fatty alcohols, (C8 - C22) ethoxylated and propoxylated fatty alcohols, straight chain (C4 - C10) alkyl(poly)glycosides (Paragraph [0138]), branched chain (C4 - C10) alkyl(poly)glycosides; and alkoxyated sorbitan fatty esters (Paragraph [0062]), alkoxyated sorbitol fatty esters, ethoxylated sorbitan fatty esters, ethoxylated sorbitol fatty esters, polyoxyethylene sorbitan monolaurate, polyoxyethylene sorbitan monopalmitate, polyoxyethylene sorbitan monostearate, and combinations thereof. As per claim 13, Lindner and Formstone, in combination, disclose the liquid agricultural adjuvant of claim 12, and Lindner discloses further comprising water (Abstract) and/or other additives, wherein the liquid agricultural adjuvant (homogenous stable liquid agrochemical concentrate formulations: useful as tank mix adjuvants; Abstract) comprises from about 0.1 wt.% to 20 wt.% (present in an amount from 0.5 to 50 % by weight of the total concentrate composition; Paragraphs [0053], [0054]) of the at least one alkyl (C1 - C8) ester of an alkyl (C12 -C16) acid (use of lauric acid, myristic acid, and palmitic acid, which all constitute alkyl (C1 - 8) esters of an alkyl (C12-C16) acid; Paragraph [0053]); and about 1 wt.% to 50 wt. % (from 1 to 25% by weight of a surfactant; Abstract; Paragraphs [0005], [0020]; Claims 3, 5, 7) of the at least one anionic surfactant (Abstract; Paragraph [0020]; Claims 3, 5), and about 1 wt.% to 50 wt.% (from 1 to 25% by weight of a surfactant; Abstract; Paragraphs [0005], [0020]; Claims 3, 5, 7) of the at least one

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
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nonionic surfactant (Abstract; Paragraph [0020]; Claim 1), and 2 to 80 wt. % (from 20 to 60% by weight of water; Abstract; Claim 7) of the water (Abstract) or other additives.

As per claim 14, Lindner and Formstone, in combination, disclose the liquid agricultural adjuvant of claim 13, and Lindner discloses further comprising an additive selected from the group consisting of: preservatives (Paragraph [0005]), clarifiers, anti-freezing agents (Paragraph [0005]), hydrotropes (Paragraph [0092]), stabilizers (Abstract), antioxidants, acidifiers, chelates (Paragraph [0104]), complexing agents, dyes, rheology modifiers, anti foams (Paragraph (0049)), anti-drift and water, oil (Abstract) or other solvents (Paragraph [0051]), and combinations thereof.

As per claims 15/1 and 15/13, Lindner and Formstone, in combination, disclose the adjuvant concentrate prepared according of claim 1 or claim 13, and Lindner further discloses a method of diluting a liquid agricultural adjuvant (homogenous stable liquid agrochemical concentrate formulations which form stable dilutions with water; Abstract), comprising: diluting the adjuvant concentration prepared with water (homogenous stable liquid agrochemical concentrate formulations which form stable dilutions with water; Abstract) at a ratio by weight of liquid agricultural adjuvant to water 1 :5000 to 1 :10 (diluting a concentrate with from 1 to 10,000 parts water per part concentrate; Paragraph [0041]; Claims 9, 10) to yield a stable diluted emulsion (Paragraph [0050]) and/or microemulsion (Paragraph [0050]).

As per claims 16/15/1 and 16/15/13, Lindner and Formstone, in combination, disclose the method of claims 15/1 and 15/13, and Lindner discloses wherein the water further contains at least one agricultural compound (Paragraph [0126]) selected from the group consisting of: insecticides (Paragraph [0126]), fungicides (Paragraph [0126]), herbicides (Paragraph [0126]), desiccants, defoliants, acaricides, nutrients (Abstract), miticides, bactericides, biocides, ovicides, nematocides, insect growth regulators, plant growth regulators (Paragraph [0126]), and combinations thereof.

As per claims 17/16/15/1 and 17/16/15/13, Lindner and Formstone, in combination, disclose the method of any one of claims 16/15/1 and 16/15/13, and Lindner further discloses wherein the liquid agricultural adjuvant is diluted in a mixing tank (Abstract), a spray tank (Abstract; Paragraphs [0041]-[0043]; Claims 8-10), a container, or an inline irrigation system.

As per claims 18/17/16/15/1 and 18/17/16/15/13, Lindner and Formstone, in combination, disclose the method of any one of claims 17/16/15/1 and 17/16/15/13, and Lindner further discloses wherein the stable diluted emulsion (Paragraph [0050]) and/or microemulsion (Paragraph [0050]) is applied on at least one member of the group consisting of: plants (Paragraph [0022]; Claims 2, 10), weeds (Paragraphs [0042], [0043]), seeds, soil (Paragraph [0043]; Claim 10), urban places, and forests, via an apparatus selected from the group comprising: air assisted sprayers, conventional sprayers (Abstract; Paragraphs [0041]-[0043]), ultra-low volumes equipment such as aerial, electrostatic, foggers and misting spray equipment and chemigation systems, pivots, sprinklers, and combinations thereof.

Response to Applicant's Arguments

(1) Applicant argues that an essential feature of Lindner is the concentrated aqueous electrolyte, and one of ordinary skill in the art viewing the teachings of Lindner would conclude that such a concentrated aqueous electrolyte must be present in any composition based on Lindner. Applicant notes that the instant claims do not include any concentrated aqueous electrolyte as per the teachings of Lindner. Applicant argues that any combination of Lindner with the secondary prior art references will always necessitate the inclusion of the concentrate aqueous electrolyte, and as such will never result in the claimed invention. Applicant argues that the express and necessary teaching of the concentrate aqueous electrolyte of Lindner teaches away from an invention that lacks this essential feature.

With regards to Applicant's **argument (1)**, the traversal argument is not found persuasive. Even though Lindner's composition includes additional components that are not recited in the instant application's invention (e.g. concentrated aqueous electrolyte), it is not a "teaching away" because of the recitation "comprising" in the instant claims. The transitional term "comprising" is open-ended and does not exclude additional, unrecited elements or method steps. **Note: MPEP 2111.03.**

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
	(2) Applicant argues that the skilled person in the art cannot, and would not, reasonably expect that a combination of one chemical having a flashpoint of higher than about 100°C together with other chemicals where there is no teaching of any flash point would result in an adjuvant wherein the flash point has remained higher than about 100°C. Thus, Applicant argues that no combination of Lindner and Formstone will arrive at the instantly claimed invention. With regards to Applicant's argument (2), the traversal argument is not found persuasive. The formulation of the combined teachings of Lindner and Formstone disclose a composition comprising the claimed components. Lindner discloses that ester of C₁₂-C₁₈ fatty acids, such as alkyl esters of myristic acid, may be used as the oil component. Formstone discloses the use of isopropyl myristate, which has a flash point of higher than 100°C. One of ordinary skill in the art would have been motivated to use a solvent with a higher flash point, such as isopropyl myristate, because lower flash point solvents are disclosed as requiring special handling and safety systems. The composition of the combined teachings of Lindner and Formstone overlaps with the components used in the instant Specification's example ORO-009 K, which was disclosed as having a flash point of greater than 100°C. Thus, absent evidence to the contrary, the composition of the combined teachings of Lindner and Formstone would be expected to have a flash point of higher than 100°C. Furthermore, one of ordinary skill in the art would have been motivated to provide a composition with a higher flash point in order to reduce the additional handling and safety systems required by lower flash point compositions. (3) Applicant argues that Xu's paragraph 0126 discloses ethoxylation and propoxylation of PO-EO block alkoxyates only, and there is no teaching, suggestion, or motivation by Xu to ethoxylate anything other than PO-EO block ethoxylates. With regards to Applicant's argument (3), the rejection of claim 7 has been modified to include it with the rejection over Lindner and Formstone. As discussed above, Lindner discloses and exemplifies the use of an ethoxylated C12/15 fatty alcohol with a degree of ethoxylation of 4 (OSS3) as the nonionic surfactant (Lindner para.0135, 0166).

Box No. VII **Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:

Regarding Claim 11 of the instant PCT application, a space should be added between "80" and "wt." in the last line.

Regarding Claim 12 of the instant PCT application, "anionic surfactants" in line 3 should be "anionic surfactant".

Regarding Claim 13 of the instant PCT application, a space should be added between "80" and "wt." in the last line.

Regarding Claim 18 of the instant PCT application, "ultra-low volumes equipment" in line 4 should be "ultra-low volume equipment".

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claim 18 is objected to under PCT Article 6 as lacking clarity because claim 18 is indefinite for the following reason(s): the phrase "such as" in line 4 renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).