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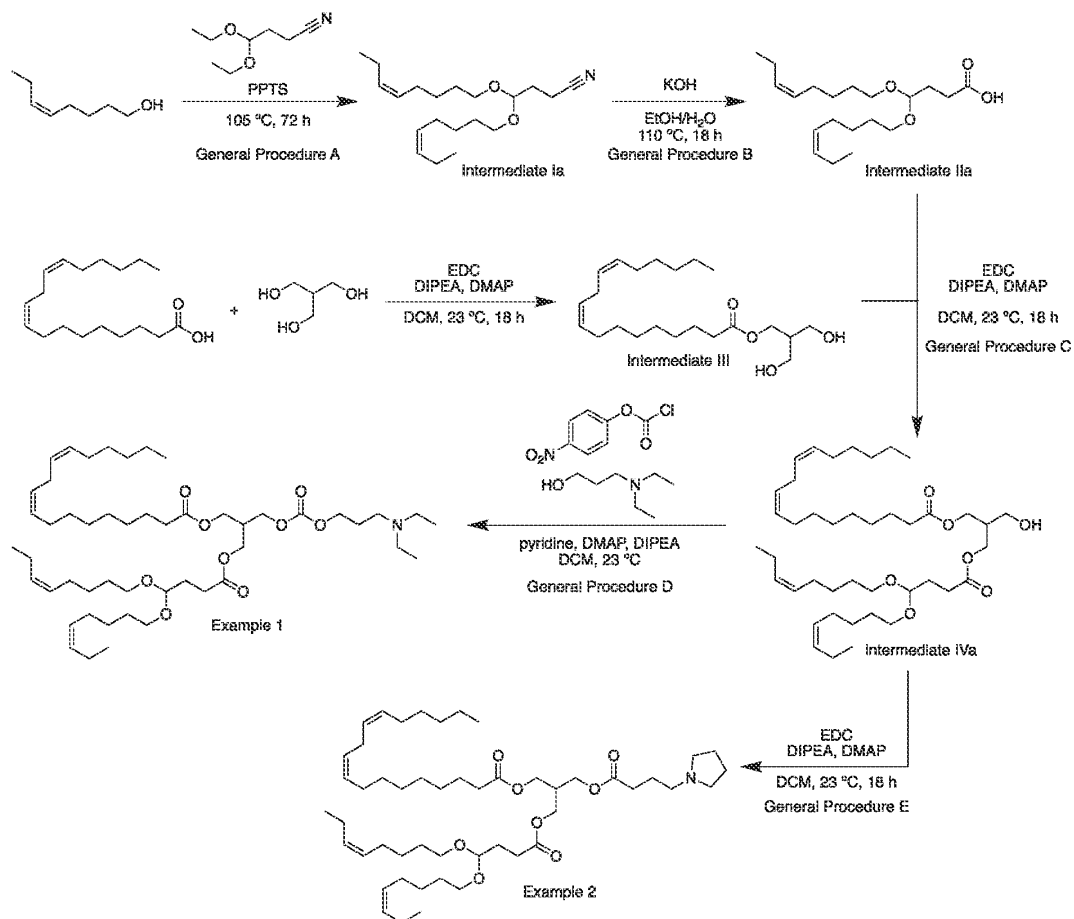


FIG. 1

| Example | Structure        |
|---------|------------------|
| 1       | <p>Example 1</p> |
| 2       | <p>Example 2</p> |
| 3       | <p>Example 3</p> |
| 4       | <p>Example 4</p> |

FIG. 2

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| Example | Structure        |
|---------|------------------|
| 5       | <p>Example 5</p> |
| 6       | <p>Example 6</p> |
| 7       | <p>Example 7</p> |
| 8       | <p>Example 8</p> |
| 9       | <p>Example 9</p> |

FIG. 2 (continued)

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| Example | Structure         |
|---------|-------------------|
| 10      | <p>Example 10</p> |
| 11      | <p>Example 11</p> |
| 12      | <p>Example 12</p> |
| 13      | <p>Example 13</p> |
| 14      | <p>Example 14</p> |

FIG. 2 (continued)

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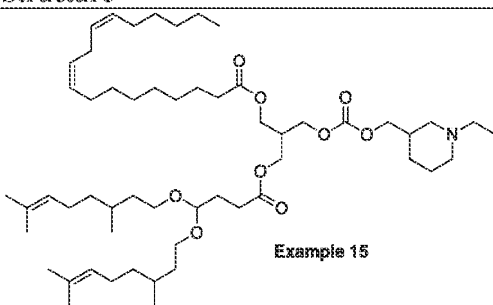
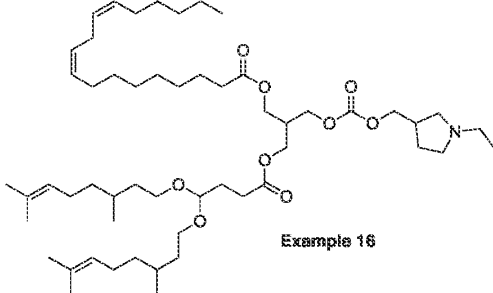
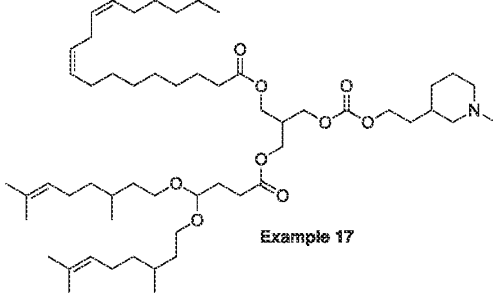
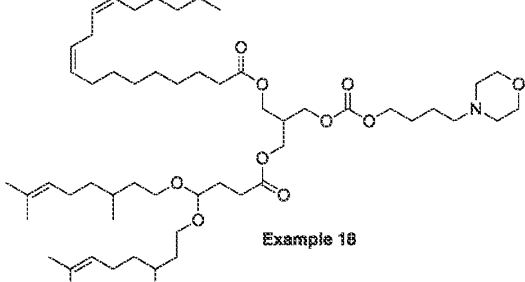
| Example | Structure                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15      |  <p>Chemical structure of Example 15: A complex molecule featuring a long-chain fatty acid derivative (top) and a branched chain with multiple ester and ether linkages (bottom). The structure includes a piperidine ring substituted with an ethyl group, connected via an ester linkage to a central chain. The label "Example 15" is present within the structure area.</p> |
| 16      |  <p>Chemical structure of Example 16: Similar to Example 15, but the piperidine ring is replaced by a pyrrolidine ring substituted with an ethyl group. The label "Example 16" is present within the structure area.</p>                                                                                                                                                        |
| 17      |  <p>Chemical structure of Example 17: Similar to Example 15, but the piperidine ring is substituted with a methyl group instead of an ethyl group. The label "Example 17" is present within the structure area.</p>                                                                                                                                                            |
| 18      |  <p>Chemical structure of Example 18: Similar to Example 15, but the piperidine ring is replaced by a morpholine ring. The label "Example 18" is present within the structure area.</p>                                                                                                                                                                                       |

FIG. 2 (continued)

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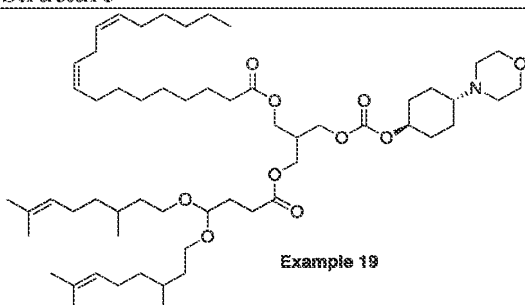
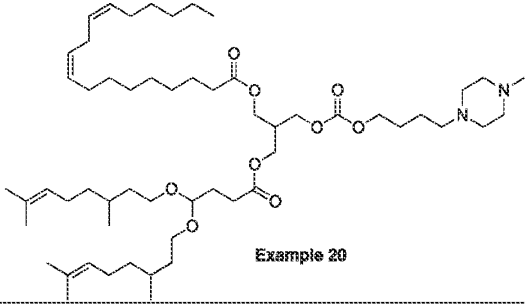
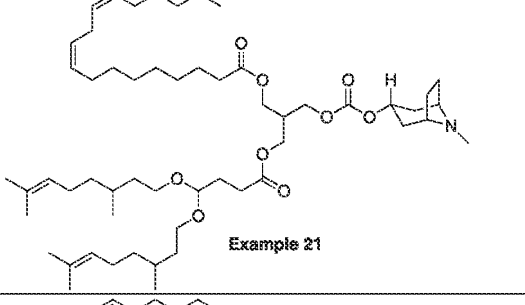
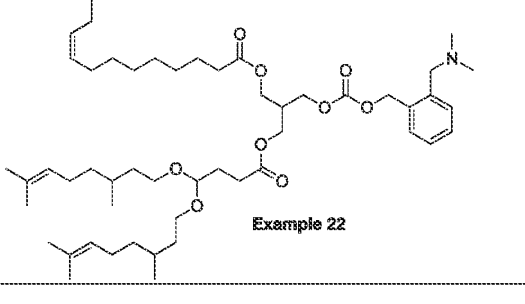
| Example | Structure                                                                                                                                                                                                                                                                                                                                                                               |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 19      |  <p>Chemical structure of Example 19: A complex molecule featuring a long-chain fatty acid derivative (top) and a branched fatty acid derivative (bottom), both linked via ester bonds to a central chain. The central chain includes a carbonate group and a morpholine ring.</p> <p>Example 19</p>   |
| 20      |  <p>Chemical structure of Example 20: A complex molecule featuring a long-chain fatty acid derivative (top) and a branched fatty acid derivative (bottom), both linked via ester bonds to a central chain. The central chain includes a carbonate group and a morpholine ring.</p> <p>Example 20</p>   |
| 21      |  <p>Chemical structure of Example 21: A complex molecule featuring a long-chain fatty acid derivative (top) and a branched fatty acid derivative (bottom), both linked via ester bonds to a central chain. The central chain includes a carbonate group and a morpholine ring.</p> <p>Example 21</p>  |
| 22      |  <p>Chemical structure of Example 22: A complex molecule featuring a long-chain fatty acid derivative (top) and a branched fatty acid derivative (bottom), both linked via ester bonds to a central chain. The central chain includes a carbonate group and a morpholine ring.</p> <p>Example 22</p> |

FIG. 2 (continued)

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| Example | Structure                                                                                                                                                                                                      |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 23      | <p>Chemical structure of Example 23, showing a complex molecule with multiple ester and ether linkages, a long-chain unsaturated fatty acid, and a pyrrolidine ring.</p>                                       |
| 24      | <p>Chemical structure of Example 24, showing a complex molecule with multiple ester and ether linkages, a long-chain unsaturated fatty acid, and a piperidine ring.</p>                                        |
| 25      | <p>Chemical structure of Example 25, showing a complex molecule with multiple ester and ether linkages, a long-chain unsaturated fatty acid, and a piperidine ring substituted with an ethyl group.</p>        |
| 26      | <p>Chemical structure of Example 26, showing a complex molecule with multiple ester and ether linkages, a long-chain unsaturated fatty acid, and a piperidine ring substituted with a pyridine ring.</p>       |
| 27      | <p>Chemical structure of Example 27, showing a complex molecule with multiple ester and ether linkages, a long-chain unsaturated fatty acid, and a piperidine ring substituted with a dimethylamino group.</p> |

FIG. 2 (continued)

| Example | Structure         |
|---------|-------------------|
| 28      | <p>Example 28</p> |
| 29      | <p>Example 29</p> |
| 30      | <p>Example 30</p> |
| 31      | <p>Example 31</p> |

FIG. 2 (continued)

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| Example | Structure                                                                                                                                                                                                                |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 32      | <p>Chemical structure of Example 32: A complex molecule featuring a long-chain unsaturated fatty acid ester, a central glycerol backbone, and two perfluorinated alkyl chains. The molecule is labeled "Example 32".</p> |
| 33      | <p>Chemical structure of Example 33: A complex molecule featuring a long-chain unsaturated fatty acid ester, a central glycerol backbone, and two perfluorinated alkyl chains. The molecule is labeled "Example 33".</p> |
| 34      | <p>Chemical structure of Example 34: A complex molecule featuring a long-chain unsaturated fatty acid ester, a central glycerol backbone, and two perfluorinated alkyl chains. The molecule is labeled "Example 34".</p> |
| 35      | <p>Chemical structure of Example 35: A complex molecule featuring a long-chain unsaturated fatty acid ester, a central glycerol backbone, and two perfluorinated alkyl chains. The molecule is labeled "Example 35".</p> |

FIG. 2 (continued)

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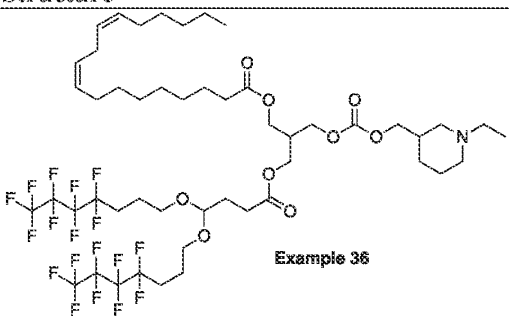
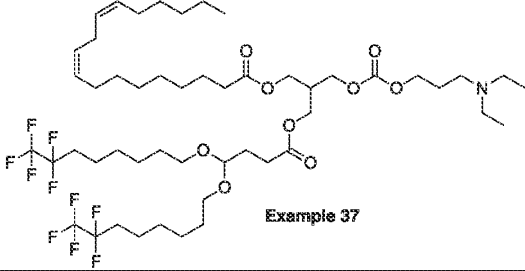
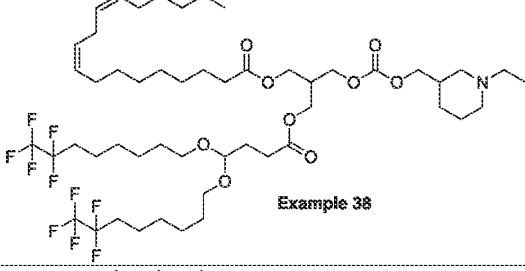
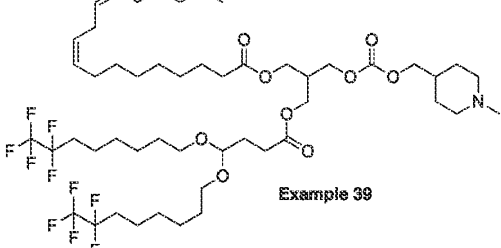
| Example | Structure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 36      |  <p>Chemical structure of Example 36: A complex molecule featuring a long-chain alkyl chain with a terminal double bond, linked via an ester to a central carbon atom. This central carbon is also linked via an ester to a 2-(diethylamino)ethyl group. The central carbon is further linked via an ester to a 2,2,2-trifluoroethyl group, which is in turn linked via an ester to a 2,2,2-trifluoroethyl group.</p> <p>Example 36</p>   |
| 37      |  <p>Chemical structure of Example 37: A complex molecule featuring a long-chain alkyl chain with a terminal double bond, linked via an ester to a central carbon atom. This central carbon is also linked via an ester to a 2-(diethylamino)ethyl group. The central carbon is further linked via an ester to a 2,2,2-trifluoroethyl group, which is in turn linked via an ester to a 2,2,2-trifluoroethyl group.</p> <p>Example 37</p>   |
| 38      |  <p>Chemical structure of Example 38: A complex molecule featuring a long-chain alkyl chain with a terminal double bond, linked via an ester to a central carbon atom. This central carbon is also linked via an ester to a 2-(diethylamino)ethyl group. The central carbon is further linked via an ester to a 2,2,2-trifluoroethyl group, which is in turn linked via an ester to a 2,2,2-trifluoroethyl group.</p> <p>Example 38</p>  |
| 39      |  <p>Chemical structure of Example 39: A complex molecule featuring a long-chain alkyl chain with a terminal double bond, linked via an ester to a central carbon atom. This central carbon is also linked via an ester to a 2-(diethylamino)ethyl group. The central carbon is further linked via an ester to a 2,2,2-trifluoroethyl group, which is in turn linked via an ester to a 2,2,2-trifluoroethyl group.</p> <p>Example 39</p> |

FIG. 2 (continued)

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| Example | Structure                                                                                                                                                                                                                           |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 40      | <p>Chemical structure of Example 40: A complex molecule featuring a long alkyl chain with a terminal double bond, a central ester linkage, and a side chain containing a piperidine ring. The molecule is labeled "Example 40".</p> |
| 41      | <p>Chemical structure of Example 41: A complex molecule featuring a long alkyl chain with a terminal double bond, a central ester linkage, and a side chain containing a piperidine ring. The molecule is labeled "Example 41".</p> |
| 42      | <p>Chemical structure of Example 42: A complex molecule featuring a long alkyl chain with a terminal double bond, a central ester linkage, and a side chain containing a piperidine ring. The molecule is labeled "Example 42".</p> |
| 43      | <p>Chemical structure of Example 43: A complex molecule featuring a long alkyl chain with a terminal double bond, a central ester linkage, and a side chain containing a piperidine ring. The molecule is labeled "Example 43".</p> |

FIG. 2 (continued)

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| Example | Structure                                                                                                                                                                                                                                                |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 44      | <p>Chemical structure of Example 44: A complex molecule featuring a long-chain alkyl chain with a terminal double bond, a central ester linkage, and a side chain containing a fluorinated ether and a terminal piperidine ring.</p>                     |
| 45      | <p>Chemical structure of Example 45: A complex molecule featuring a long-chain alkyl chain with a terminal double bond, a central ester linkage, and a side chain containing a fluorinated ether and a terminal piperidine ring with a methyl group.</p> |
| 46      | <p>Chemical structure of Example 46: A complex molecule featuring a long-chain alkyl chain with a terminal double bond, a central ester linkage, and a side chain containing a fluorinated ether and a terminal pyrrolidine ring.</p>                    |
| 47      | <p>Chemical structure of Example 47: A complex molecule featuring a long-chain alkyl chain with a terminal double bond, a central ester linkage, and a side chain containing a fluorinated ether and a terminal diethylamino group.</p>                  |

FIG. 2 (continued)

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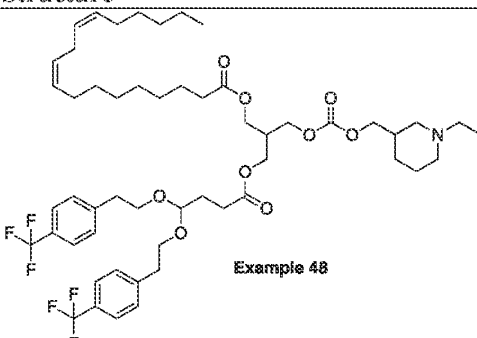
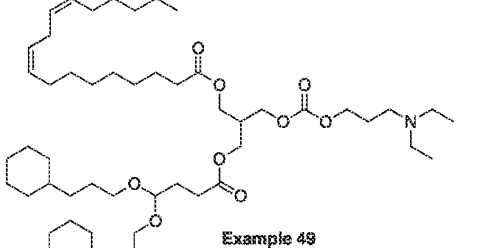
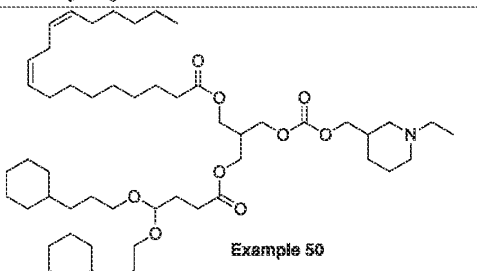
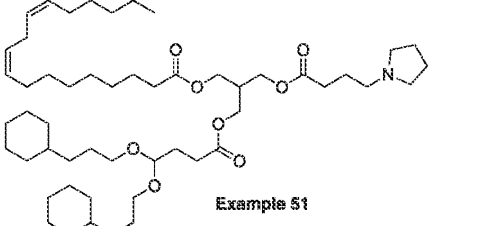
| Example | Structure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 48      |  <p>Chemical structure of Example 48: A complex molecule featuring a long-chain fatty acid derivative (18:1 n-7) linked via an ester bond to a central carbon atom. This central carbon is also linked via an ester bond to a 4-ethylpiperidine-1-carboxylic acid derivative. The central carbon is further linked via an ester bond to a 4,4'-bis(trifluoromethyl)-1,3-bis(methyl)oxybenzene derivative.</p> <p>Example 48</p> |
| 49      |  <p>Chemical structure of Example 49: A complex molecule featuring a long-chain fatty acid derivative (18:1 n-7) linked via an ester bond to a central carbon atom. This central carbon is also linked via an ester bond to a 4-ethylpiperidine-1-carboxylic acid derivative. The central carbon is further linked via an ester bond to a 4,4'-bis(methyl)cyclohexylmethoxy derivative.</p> <p>Example 49</p>                   |
| 50      |  <p>Chemical structure of Example 50: A complex molecule featuring a long-chain fatty acid derivative (18:1 n-7) linked via an ester bond to a central carbon atom. This central carbon is also linked via an ester bond to a 4-ethylpiperidine-1-carboxylic acid derivative. The central carbon is further linked via an ester bond to a 4,4'-bis(methyl)cyclohexylmethoxy derivative.</p> <p>Example 50</p>                  |
| 51      |  <p>Chemical structure of Example 51: A complex molecule featuring a long-chain fatty acid derivative (18:1 n-7) linked via an ester bond to a central carbon atom. This central carbon is also linked via an ester bond to a 4-ethylpiperidine-1-carboxylic acid derivative. The central carbon is further linked via an ester bond to a 4,4'-bis(methyl)cyclohexylmethoxy derivative.</p> <p>Example 51</p>                 |

FIG. 2 (continued)

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| Example | Structure         |
|---------|-------------------|
| 52      | <p>Example 52</p> |
| 53      | <p>Example 53</p> |
| 54      | <p>Example 54</p> |
| 55      | <p>Example 55</p> |

FIG. 2 (continued)

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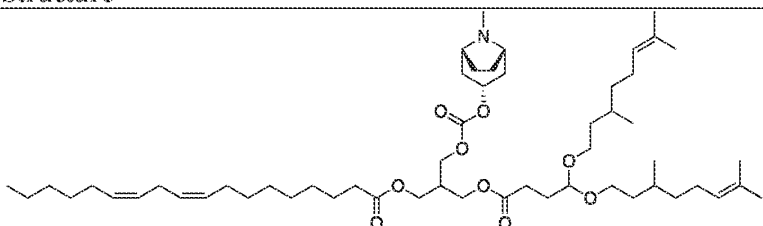
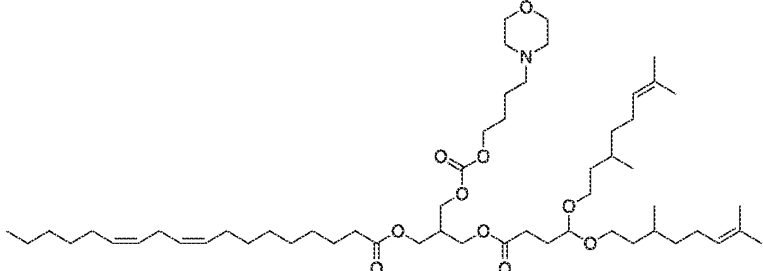
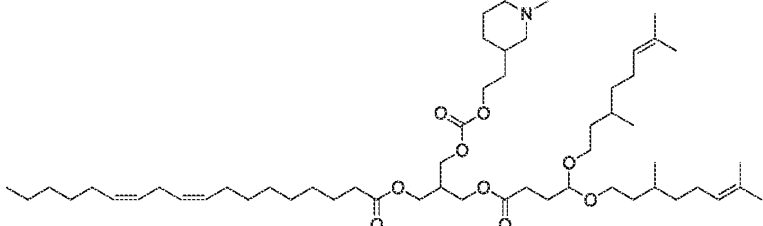
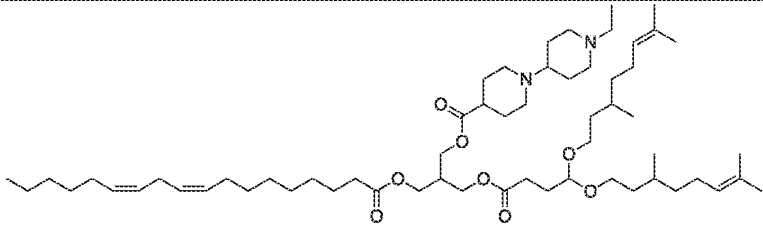
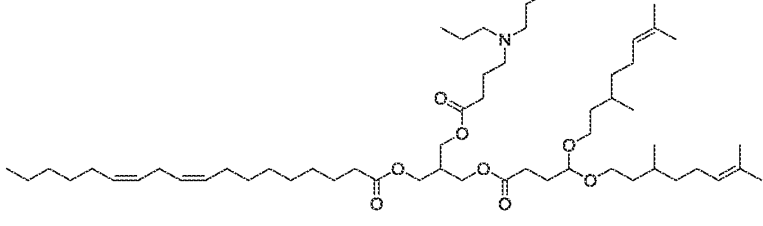
| Example | Structure                                                                                              |
|---------|--------------------------------------------------------------------------------------------------------|
| 56      |  <p>Example 56</p>   |
| 57      |  <p>Example 57</p>   |
| 58      |  <p>Example 58</p>  |
| 59      |  <p>Example 59</p> |
| 60      |  <p>Example 60</p> |

FIG. 2 (continued)

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| Example | Structure         |
|---------|-------------------|
| 61      | <p>Example 61</p> |
| 62      | <p>Example 62</p> |
| 63      | <p>Example 63</p> |
| 64      | <p>Example 64</p> |
| 65      | <p>Example 65</p> |

FIG. 2 (continued)

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| Example | Structure         |
|---------|-------------------|
| 66      | <p>Example 66</p> |
| 67      | <p>Example 67</p> |
| 68      | <p>Example 68</p> |
| 69      | <p>Example 69</p> |

FIG. 2 (continued)

18/34

| Example | Structure         |
|---------|-------------------|
| 70      | <p>Example 70</p> |
| 71      | <p>Example 71</p> |
| 72      | <p>Example 72</p> |
| 73      | <p>Example 73</p> |
| 74      | <p>Example 74</p> |

FIG. 2 (continued)

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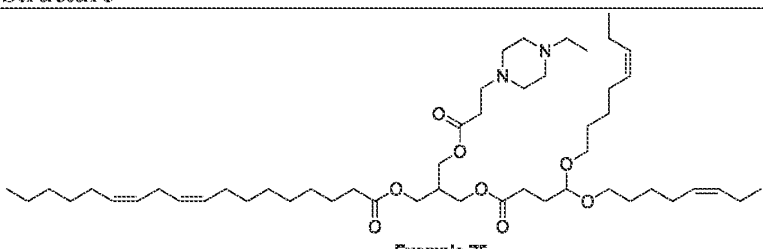
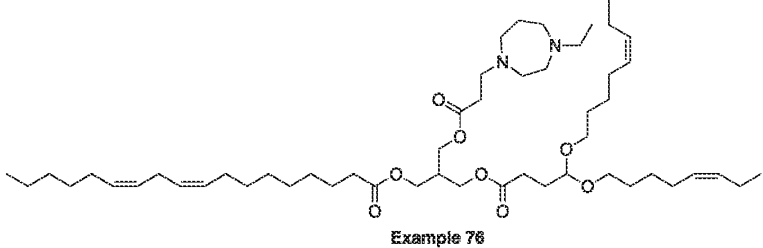
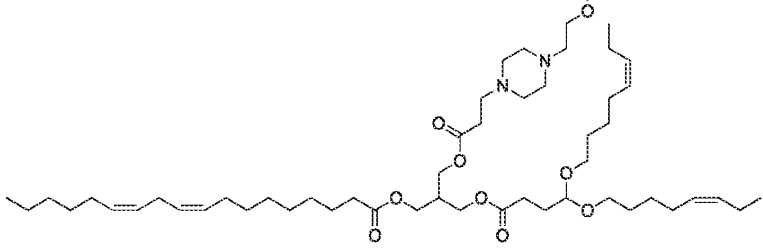
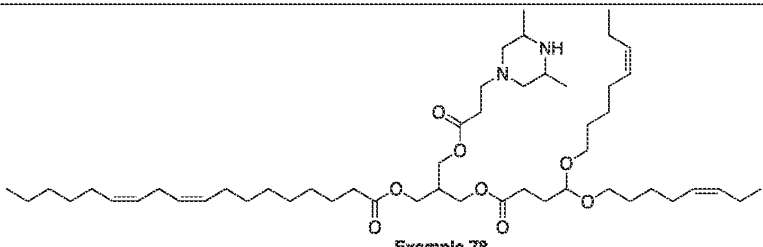
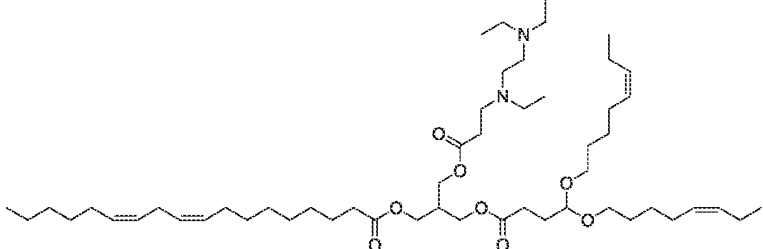
| Example | Structure                                                                                              |
|---------|--------------------------------------------------------------------------------------------------------|
| 75      |  <p>Example 75</p>   |
| 76      |  <p>Example 76</p>   |
| 77      |  <p>Example 77</p>  |
| 78      |  <p>Example 78</p> |
| 79      |  <p>Example 79</p> |

FIG. 2 (continued)

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| Example | Structure                                                                                                                                                                                                                                                                                                                                                                                               |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 80      | <p>Chemical structure of Example 80: A symmetrical molecule consisting of two long unsaturated alkyl chains (1-octadecenyl groups) connected via a central linker. The linker is composed of two ester groups flanking a central piperidine ring. The piperidine ring is substituted with a dimethylamino group (N(CH<sub>3</sub>)<sub>2</sub>) at the 4-position.</p> <p>Example 80</p>                |
| 81      | <p>Chemical structure of Example 81: A symmetrical molecule consisting of two long unsaturated alkyl chains (1-octadecenyl groups) connected via a central linker. The linker is composed of two ester groups flanking a central piperidine ring. The piperidine ring is substituted with a 4-pyridylmethyl group (CH<sub>2</sub>-C<sub>5</sub>H<sub>4</sub>N) at the 4-position.</p> <p>Example 81</p> |
| 82      | <p>Chemical structure of Example 82: A symmetrical molecule consisting of two long unsaturated alkyl chains (1-octadecenyl groups) connected via a central linker. The linker is composed of two ester groups flanking a central piperidine ring. The piperidine ring is substituted with a 4-pyridylmethyl group (CH<sub>2</sub>-C<sub>5</sub>H<sub>4</sub>N) at the 4-position.</p> <p>Example 82</p> |
| 83      | <p>Chemical structure of Example 83: A symmetrical molecule consisting of two long unsaturated alkyl chains (1-octadecenyl groups) connected via a central linker. The linker is composed of two ester groups flanking a central piperidine ring. The piperidine ring is substituted with a dimethylamino group (N(CH<sub>3</sub>)<sub>2</sub>) at the 4-position.</p> <p>Example 83</p>                |

FIG. 2 (continued)

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| Example | Structure         |
|---------|-------------------|
| 84      | <p>Example 84</p> |
| 85      | <p>Example 85</p> |
| 86      | <p>Example 86</p> |
| 87      | <p>Example 87</p> |

FIG. 2 (continued)

22/34

| Example | Structure         |
|---------|-------------------|
| 88      | <p>Example 88</p> |
| 89      | <p>Example 89</p> |
| 90      | <p>Example 90</p> |
| 91      | <p>Example 91</p> |
| 92      | <p>Example 92</p> |

FIG. 2 (continued)

23/34

| Example | Structure         |
|---------|-------------------|
| 93      | <p>Example 93</p> |
| 94      | <p>Example 94</p> |
| 95      | <p>Example 95</p> |
| 96      | <p>Example 96</p> |
| 97      | <p>Example 97</p> |

FIG. 2 (continued)

24/34

| Example | Structure          |
|---------|--------------------|
| 98      | <p>Example 98</p>  |
| 99      | <p>Example 99</p>  |
| 100     | <p>Example 100</p> |
| 101     | <p>Example 101</p> |
| 102     | <p>Example 102</p> |

FIG. 2 (continued)

25/34

| Example | Structure          |
|---------|--------------------|
| 103     | <p>Example 103</p> |
| 104     | <p>Example 104</p> |
| 105     | <p>Example 105</p> |
| 106     | <p>Example 106</p> |
| 107     | <p>Example 107</p> |

FIG. 2 (continued)

26/34

| Example | Structure          |
|---------|--------------------|
| 108     | <p>Example 108</p> |
| 109     | <p>Example 109</p> |
| 110     | <p>Example 110</p> |
| 111     | <p>Example 111</p> |
| 112     | <p>Example 112</p> |

FIG. 2 (continued)

27/34

| Example | Structure          |
|---------|--------------------|
| 113     | <p>Example 113</p> |
| 114     | <p>Example 114</p> |
| 115     | <p>Example 115</p> |
| 116     | <p>Example 116</p> |
| 117     | <p>Example 117</p> |

FIG. 2 (continued)

28/34

| Example | Structure          |
|---------|--------------------|
| 118     | <p>Example 118</p> |
| 119     | <p>Example 119</p> |
| 120     | <p>Example 120</p> |
| 121     | <p>Example 121</p> |
| 122     | <p>Example 122</p> |

FIG. 2 (continued)

29/34

| Example | Structure          |
|---------|--------------------|
| 123     | <p>Example 123</p> |
| 124     | <p>Example 124</p> |
| 125     | <p>Example 125</p> |
| 126     | <p>Example 126</p> |

FIG. 2 (continued)

30/34

| Example | Structure          |
|---------|--------------------|
| 127     | <p>Example 127</p> |
| 128     | <p>Example 128</p> |
| 129     | <p>Example 129</p> |
| 130     | <p>Example 130</p> |
| 131     | <p>Example 131</p> |

FIG. 2 (continued)

31/34

| Example | Structure          |
|---------|--------------------|
| 132     | <p>Example 132</p> |
| 133     | <p>Example 133</p> |
| 134     | <p>Example 134</p> |
| 135     | <p>Example 135</p> |

FIG. 2 (continued)

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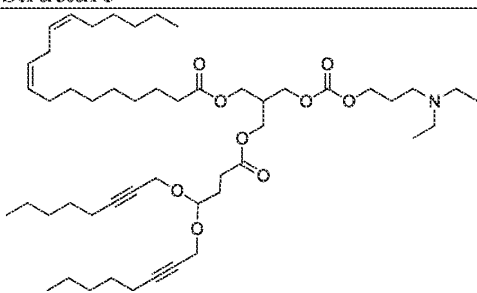
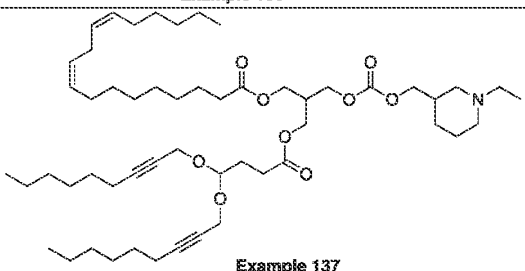
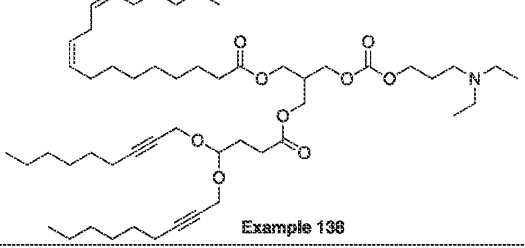
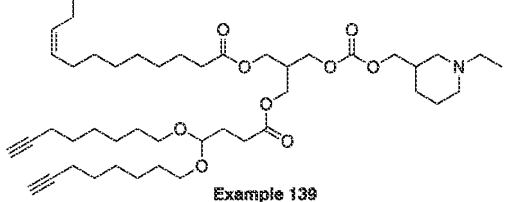
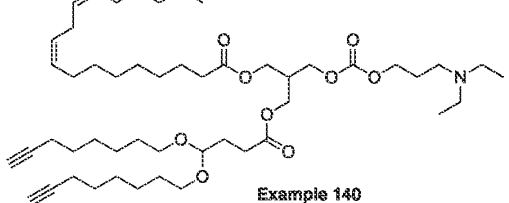
| Example | Structure                                                                                              |
|---------|--------------------------------------------------------------------------------------------------------|
| 136     |  <p>Example 136</p>   |
| 137     |  <p>Example 137</p>   |
| 138     |  <p>Example 138</p>  |
| 139     |  <p>Example 139</p> |
| 140     |  <p>Example 140</p> |

FIG. 2 (continued)

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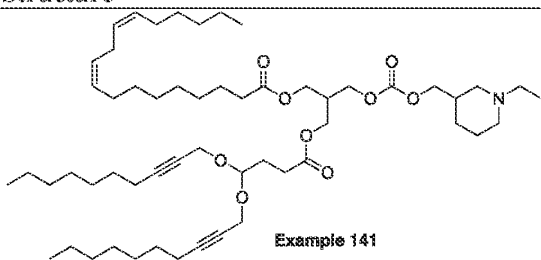
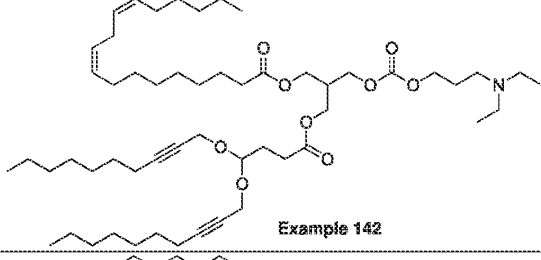
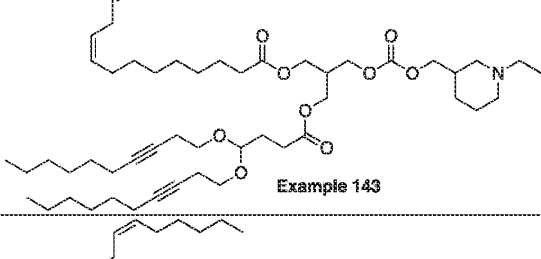
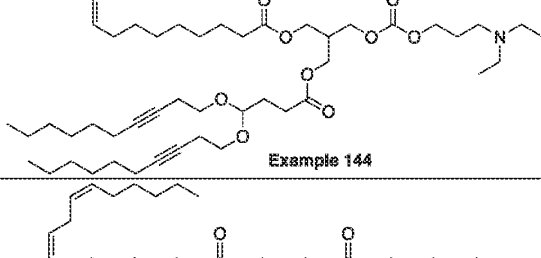
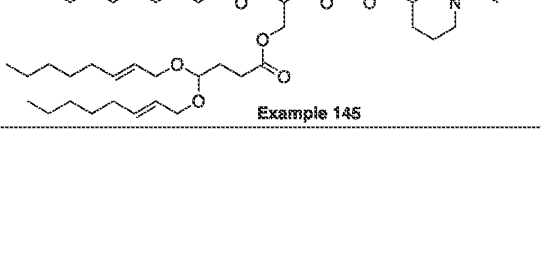
| Example | Structure                                                                                              |
|---------|--------------------------------------------------------------------------------------------------------|
| 141     |  <p>Example 141</p>   |
| 142     |  <p>Example 142</p>   |
| 143     |  <p>Example 143</p>  |
| 144     |  <p>Example 144</p> |
| 145     |  <p>Example 145</p> |

FIG. 2 (continued)

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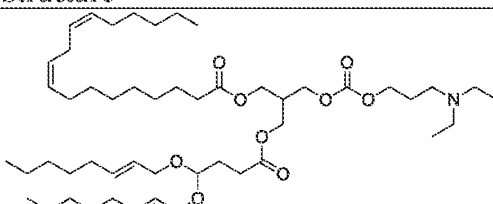
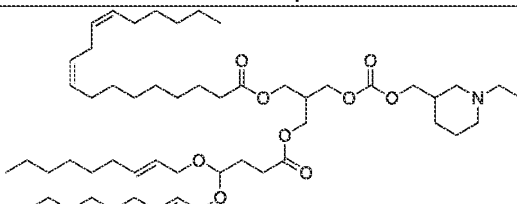
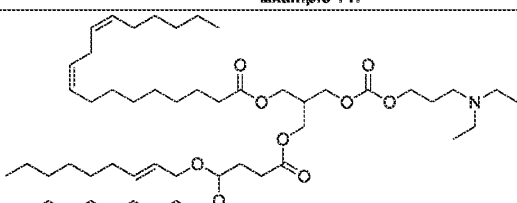
| Example | Structure                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 146     |  <p>Chemical structure of Example 146: A complex molecule featuring a long-chain fatty acid derivative (top) and a shorter-chain fatty acid derivative (bottom), both linked via ester bonds to a central chain containing a tertiary amine (N) and a carbonyl group (C=O). The structure is labeled "Example 146".</p>  |
| 147     |  <p>Chemical structure of Example 147: A complex molecule featuring a long-chain fatty acid derivative (top) and a shorter-chain fatty acid derivative (bottom), both linked via ester bonds to a central chain containing a tertiary amine (N) and a carbonyl group (C=O). The structure is labeled "Example 147".</p>  |
| 148     |  <p>Chemical structure of Example 148: A complex molecule featuring a long-chain fatty acid derivative (top) and a shorter-chain fatty acid derivative (bottom), both linked via ester bonds to a central chain containing a tertiary amine (N) and a carbonyl group (C=O). The structure is labeled "Example 148".</p> |

FIG. 2 (continued)