

**LEMBAR**  
**HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW**  
**KARYA ILMIAH : PATEN/PATEN SEDERHANA**

Judul Paten : Metode pembuatan Surfaktan metil ester sulfonat untuk aplikasi EOR  
 Nama Inventor : Hestuti, sugihardjo, Suwartiningsih, Usman, Letty Brioletty, Edwan MLB, Sri Hidayati, Novia  
 NoviaArdharini, Lusyana, Slamet H, Daliya IS, Ikhwanita  
 Identitas Paten : a. Nomor paten : IDP000047559  
 b. Tanggal penerimaan : 10 Juni 2014  
 c. Tanggal Pemberian : 31 agustus 2017  
 d. Pemegang Paten : Lemigas  
 e. Jenis paten : Paten

Hasil Penilaian Peer Review :

No.	Komponen yang dinilai	Nilai Maksimum Buku :		Nilai yang Diberikan Penilai (NP)
		Patent	Patent sederhana	
a	Kelengkapan unsur paten (10%) (Mencakup bidang teknik invensi, latar belakang invensi, uraian singkat invensi, uraian lengkap invensi, klaim, abstrak dan kelengkapan lain)	4.0	2	3
b.	Ruang Lingkup dan Kedalaman Paten (40%) (Memiliki relevansi dengan bidang keilmuan, melakukan analisis, eksplorasi, dan elaborasi terhadap teknik yang	16	8	15
c.	Kecukupan dan kemutakhiran data/informasi dan metodologi (40%) (Didukung data hasil penelitian, menggunakan kajian akademik ilmiah dan bahasa yang mudah dipahami)	16	8	15
d.	Kebermanfaatan (10%) (Memberikan manfaat bagi kemajuan teknologi, dan solusi bagi masalah yang dihadapi masyarakat)	4.0	2	3
<b>Total (100%)</b>		<b>40</b>	<b>20</b>	<b>36</b>

Nilai Pengusul = BP x NP =  $(0.4) \times 36 = 1,2$

Ket : Bobot Peran (BP) : Sendiri = 1; Ketua = 0,6; Anggota = 0,4 dibagi jumlah anggota

Malang, 23 Desember 2020  
 Penilai Sejawat I / II / III (Lingkari salah satu)

**Prof. Dr. Ir. Imani Santoso, M.P**  
 NIP 196810051995121001  
 Program Studi Teknologi Industri Pertanian  
 Fak Tekn. Pertanian Universitas Brawijaya

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Hasil Penilaian Peer Review :

No.	Komponen yang dinilai	Nilai Maksimum Buku :		Nilai yang Diberikan Penilai (NP)
		<input type="checkbox"/> Paten	<input checked="" type="checkbox"/> Paten sederhana	
a	Kelengkapan unsur paten (10%) (Mencakup bidang teknik invensi, latar belakang invensi, uraian singkat invensi, uraian lengkap invensi, klaim, abstrak dan kelengkapan lain)	4.0	2	2
b.	Ruang Lingkup dan Kedalaman Paten (40%) (Memiliki relevansi dengan bidang keilmuan, melakukan analisis, eksplorasi, dan elaborasi terhadap teknik yang	16	8	7
c.	Kecukupan dan kemutakhiran data/informasi dan metodologi (40%) (Didukung data hasil penelitian, menggunakan kajian akademik ilmiah dan bahasa yang mudah dipahami)	16	8	7
d.	Kebermanfaatan (10%) (Memberikan manfaat bagi kemajuan teknologi, dan solusi bagi masalah yang dihadapi masyarakat)	4.0	2	2
<b>Total (100%)</b>		<b>40</b>	<b>20</b>	<b>18</b>

Nilai Pengusul = BP x NP =  $9036 \times 18 = 0,65$

Ket : Bobot Peran (BP) : Sendiri = 1; Ketua = 0,6; Anggota = 0,4 dibagi jumlah anggota

Bandar Lampung, 15/1/2024  
 Penilai Sejawat I / II / III (Lingkari salah satu)

  
**Prof. Dr. Ir. Murhadi, M.S**

NIP 196403261989021001

Program Studi Teknologi Hasil Pertanian  
 Fakultas Pertanian, Universitas Lampung

**HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW  
KARYA ILMIAH : PATEN/PATEN SEDERHANA**

Judul Paten : Metode pembuatan Surfaktan metil ester sulfonat untuk aplikasi EOR  
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Hasil Penilaian Peer Review :

No.	Komponen yang dinilai	Nilai Maksimum Buku :		Nilai yang Diberikan Penilai (NP)
		<input checked="" type="checkbox"/> Paten	<input checked="" type="checkbox"/> Paten sederhana	
a	Kelengkapan unsur paten (10%) (Mencakup bidang teknik invensi, latar belakang invensi, uraian singkat invensi, uraian lengkap invensi, klaim, abstrak dan kelengkapan lain)	4.0	2	4
b.	Ruang Lingkup dan Kedalaman Paten (40%) (Memiliki relevansi dengan bidang keilmuan, melakukan analisis, eksplorasi, dan elaborasi terhadap teknik yang	16	8	14
c.	Kecukupan dan kemutakhiran data/informasi dan metodologi (40%) (Didukung data hasil penelitian, menggunakan kajian akademik ilmiah dan bahasa yang mudah dipahami)	16	8	14
d.	Kebermanfaatan (10%) (Memberikan manfaat bagi kemajuan teknologi, dan solusi bagi masalah yang dihadapi masyarakat)	4.0	2	4
<b>Total (100%)</b>		<b>40</b>	<b>20</b>	<b>36</b>

Nilai Pengusul = BP x NP =  $\frac{0,4}{1} \times 36 = 14,4$   $\frac{0,6}{1} \times 20 = 12$   $\frac{1,3}{1} \times 14,4 = 18,72$   $\frac{1,3}{1} \times 12 = 15,6$   $\frac{1,3}{1} \times 18,72 = 24,336$   $\frac{1,3}{1} \times 15,6 = 20,28$   $\frac{1,3}{1} \times 24,336 = 31,6368$   $\frac{1,3}{1} \times 20,28 = 26,364$   $\frac{1,3}{1} \times 31,6368 = 41,12784$   $\frac{1,3}{1} \times 26,364 = 34,2732$   $\frac{1,3}{1} \times 41,12784 = 53,466192$   $\frac{1,3}{1} \times 34,2732 = 44,55516$   $\frac{1,3}{1} \times 53,466192 = 69,5060496$   $\frac{1,3}{1} \times 44,55516 = 57,921708$   $\frac{1,3}{1} \times 69,5060496 = 90,35786448$   $\frac{1,3}{1} \times 57,921708 = 75,3982204$   $\frac{1,3}{1} \times 90,35786448 = 117,465223824$   $\frac{1,3}{1} \times 75,3982204 = 98,01768652$   $\frac{1,3}{1} \times 117,465223824 = 152,7047909712$   $\frac{1,3}{1} \times 98,01768652 = 127,422792476$   $\frac{1,3}{1} \times 152,7047909712 = 198,51622826256$   $\frac{1,3}{1} \times 127,422792476 = 165,6496292188$   $\frac{1,3}{1} \times 198,51622826256 = 258,071096741328$   $\frac{1,3}{1} \times 165,6496292188 = 215,34451798444$   $\frac{1,3}{1} \times 258,071096741328 = 335,5724257637264$   $\frac{1,3}{1} \times 215,34451798444 = 279,947873379772$   $\frac{1,3}{1} \times 335,5724257637264 = 436,24415349284432$   $\frac{1,3}{1} \times 279,947873379772 = 363,9322353937236$   $\frac{1,3}{1} \times 436,24415349284432 = 567,117399540697616$   $\frac{1,3}{1} \times 363,9322353937236 = 473,11190601184068$   $\frac{1,3}{1} \times 567,117399540697616 = 737,2526194029069008$   $\frac{1,3}{1} \times 473,11190601184068 = 615,045477815392884$   $\frac{1,3}{1} \times 737,2526194029069008 = 958,42840522377907104$   $\frac{1,3}{1} \times 615,045477815392884 = 519,5591217600107532$   $\frac{1,3}{1} \times 958,42840522377907104 = 1245,956926790932792352$   $\frac{1,3}{1} \times 519,5591217600107532 = 375,822338288007589112$   $\frac{1,3}{1} \times 1245,956926790932792352 = 1619,7440046282126290576$   $\frac{1,3}{1} \times 375,822338288007589112 = 248,5690397744098657776$   $\frac{1,3}{1} \times 1619,7440046282126290576 = 2105,66720601667641777488$   $\frac{1,3}{1} \times 248,5690397744098657776 = 323,13975172273282551296$   $\frac{1,3}{1} \times 2105,66720601667641777488 = 2737,367367821681343307328$   $\frac{1,3}{1} \times 323,13975172273282551296 = 420,081677239552673166848$   $\frac{1,3}{1} \times 2737,367367821681343307328 = 3558,5775783681857462975264$   $\frac{1,3}{1} \times 420,081677239552673166848 = 546,1061824114184751169024$   $\frac{1,3}{1} \times 3558,5775783681857462975264 = 4626,151851878641470186784$   $\frac{1,3}{1} \times 546,1061824114184751169024 = 709,9380371348440176519728$   $\frac{1,3}{1} \times 4626,151851878641470186784 = 5924,097407442233911342912$   $\frac{1,3}{1} \times 709,9380371348440176519728 = 922,9194482752972229475648$   $\frac{1,3}{1} \times 5924,097407442233911342912 = 7691,3266296749040847457856$   $\frac{1,3}{1} \times 922,9194482752972229475648 = 1199,79528275988639083203424$   $\frac{1,3}{1} \times 7691,3266296749040847457856 = 9998,72461857737531016952128$   $\frac{1,3}{1} \times 1199,79528275988639083203424 = 1559,733867587852308081644112$   $\frac{1,3}{1} \times 9998,72461857737531016952128 = 12998,2419941525879032213776$   $\frac{1,3}{1} \times 1559,733867587852308081644112 = 2027,654027864207990506137344$   $\frac{1,3}{1} \times 12998,2419941525879032213776 = 16897,714592398364274187792$   $\frac{1,3}{1} \times 2027,654027864207990506137344 = 2635,95023622347038765797824$   $\frac{1,3}{1} \times 16897,714592398364274187792 = 22067,228969117873556443328$   $\frac{1,3}{1} \times 2635,95023622347038765797824 = 3426,73530709153150395537248$   $\frac{1,3}{1} \times 22067,228969117873556443328 = 28687,3976608532356233763264$   $\frac{1,3}{1} \times 3426,73530709153150395537248 = 4454,7558992189909551440832$   $\frac{1,3}{1} \times 28687,3976608532356233763264 = 37293,6169591092063303694272$   $\frac{1,3}{1} \times 4454,7558992189909551440832 = 5791,18266898468824168730816$   $\frac{1,3}{1} \times 37293,6169591092063303694272 = 48481,702046841968229480256$   $\frac{1,3}{1} \times 5791,18266898468824168730816 = 7528,53747068010471420330048$   $\frac{1,3}{1} \times 48481,702046841968229480256 = 63026,2126608945587083243264$   $\frac{1,3}{1} \times 7528,53747068010471420330048 = 9787,09871188413612846429056$   $\frac{1,3}{1} \times 63026,2126608945587083243264 = 81934,0764591229263208216256$   $\frac{1,3}{1} \times 9787,09871188413612846429056 = 12723,22832544937696700357824$   $\frac{1,3}{1} \times 81934,0764591229263208216256 = 106514,299396859804217068128$   $\frac{1,3}{1} \times 12723,22832544937696700357824 = 16539,19682308419005930965248$   $\frac{1,3}{1} \times 106514,299396859804217068128 = 138468,5892159177454821885696$   $\frac{1,3}{1} \times 16539,19682308419005930965248 = 21500,955870009447077102528$   $\frac{1,3}{1} \times 138468,5892159177454821885696 = 180009,1659806832691268451424$   $\frac{1,3}{1} \times 21500,955870009447077102528 = 27951,24263101228119203328$   $\frac{1,3}{1} \times 180009,1659806832691268451424 = 234011,9157748882499449088$   $\frac{1,3}{1} \times 27951,24263101228119203328 = 36336,6154203159655496432$   $\frac{1,3}{1} \times 234011,9157748882499449088 = 304215,51062735072492838144$   $\frac{1,3}{1} \times 36336,6154203159655496432 = 47237,60004641075521453616$   $\frac{1,3}{1} \times 304215,51062735072492838144 = 395480,16381555594240691584$   $\frac{1,3}{1} \times 47237,60004641075521453616 = 61408,880060334081778897024$   $\frac{1,3}{1} \times 395480,16381555594240691584 = 514124,21296022272512909056$   $\frac{1,3}{1} \times 61408,880060334081778897024 = 79831,54407843430633256608$   $\frac{1,3}{1} \times 514124,21296022272512909056 = 668361,4768482895426678176$   $\frac{1,3}{1} \times 79831,54407843430633256608 = 103780,997301964598232335936$   $\frac{1,3}{1} \times 668361,4768482895426678176 = 868869,92090277640546816288$   $\frac{1,3}{1} \times 103780,997301964598232335936 = 134915,29649255407770203672$   $\frac{1,3}{1} \times 868869,92090277640546816288 = 1129530,897173629327108611776$   $\frac{1,3}{1} \times 134915,29649255407770203672 = 175389,88543932030321284784$   $\frac{1,3}{1} \times 1129530,897173629327108611776 = 1468390,166325718125241195264$   $\frac{1,3}{1} \times 175389,88543932030321284784 = 228006,851071116394176692288$   $\frac{1,3}{1} \times 1468390,166325718125241195264 = 1908907,216223433562813553856$   $\frac{1,3}{1} \times 228006,851071116394176692288 = 296408,996392451312431700032$   $\frac{1,3}{1} \times 1908907,216223433562813553856 = 2481579,381090463631657620032$   $\frac{1,3}{1} \times 296408,996392451312431700032 = 385331,6953091867062011100416$   $\frac{1,3}{1} \times 2481579,381090463631657620032 = 3226053,195417602721154906048$   $\frac{1,3}{1} \times 385331,6953091867062011100416 = 500931,2039019427180614432544$   $\frac{1,3}{1} \times 3226053,195417602721154906048 = 4193869,154043083537501377792$   $\frac{1,3}{1} \times 500931,2039019427180614432544 = 651210,5650725255334898762304$   $\frac{1,3}{1} \times 4193869,154043083537501377792 = 5452030,900259908598751791328$   $\frac{1,3}{1} \times 651210,5650725255334898762304 = 846573,7345942831935368391008$   $\frac{1,3}{1} \times 5452030,900259908598751791328 = 7087639,17233788117837732864$   $\frac{1,3}{1} \times 846573,7345942831935368391008 = 1100545,8549725681516078908224$   $\frac{1,3}{1} \times 7087639,17233788117837732864 = 9213930,924037245533892527232$   $\frac{1,3}{1} \times 1100545,8549725681516078908224 = 1430709,6114643385970902580688$   $\frac{1,3}{1} \times 9213930,924037245533892527232 = 11978110,201248519194082794016$   $\frac{1,3}{1} \times 1430709,6114643385970902580688 = 1860922,4949036369762171354912$   $\frac{1,3}{1} \times 11978110,201248519194082794016 = 15571543,261623074952307632224$   $\frac{1,3}{1} \times 1860922,4949036369762171354912 = 2419199,2433747280690822761376$   $\frac{1,3}{1} \times 15571543,261623074952307632224 = 20243006,2201119974379999318912$   $\frac{1,3}{1} \times 2419199,2433747280690822761376 = 3144958,9163871464908069590784$   $\frac{1,3}{1} \times 20243006,2201119974379999318912 = 26315908,0861455967293999114624$   $\frac{1,3}{1} \times 3144958,9163871464908069590784 = 4088446,5913032904380490468224$   $\frac{1,3}{1} \times 26315908,0861455967293999114624 = 34210680,5119892757482198849024$   $\frac{1,3}{1} \times 4088446,5913032904380490468224 = 5314980,5686942775694637628688$   $\frac{1,3}{1} \times 34210680,5119892757482198849024 = 44473884,665582058472685850368$   $\frac{1,3}{1} \times 5314980,5686942775694637628688 = 6909474,73930256224030289273024$   $\frac{1,3}{1} \times 44473884,665582058472685850368 = 57816050,074256676022593605472$   $\frac{1,3}{1} \times 6909474,73930256224030289273024 = 9082317,16109333091239376002944$   $\frac{1,3}{1} \times 57816050,074256676022593605472 = 75160865,096533678829371687104$   $\frac{1,3}{1} \times 9082317,16109333091239376002944 = 11807012,3094213301861189279936$   $\frac{1,3}{1} \times 75160865,096533678829371687104 = 97709124,625493782478183193232$   $\frac{1,3}{1} \times 11807012,3094213301861189279936 = 15349115,9922477292419546063904$   $\frac{1,3}{1} \times 97709124,625493782478183193232 = 127021861,9231419372216381511936$   $\frac{1,3}{1} \times 15349115,9922477292419546063904 = 19953850,7899222479145409881088$   $\frac{1,3}{1} \times 127021861,9231419372216381511936 = 165128420,5000845183881315966528$   $\frac{1,3}{1} \times 19953850,7899222479145409881088 = 25940006,02689892228890262853248$   $\frac{1,3}{1} \times 165128420,5000845183881315966528 = 214666946,65010987390457107564928$   $\frac{1,3}{1} \times 25940006,02689892228890262853248 = 33722007,835068599075573416992$   $\frac{1,3}{1} \times 214666946,65010987390457107564928 = 279067030,64514283611594239834304$   $\frac{1,3}{1} \times 33722007,835068599075573416992 = 43838609,18558917879824544209024$   $\frac{1,3}{1} \times 279067030,64514283611594239834304 = 362787139,83868568695072511784576$   $\frac{1,3}{1} \times 43838609,18558917879824544209024 = 57090191,94126593243771907471616$   $\frac{1,3}{1} \times 362787139,83868568695072511784576 = 471623281,79029140303594265339936$   $\frac{1,3}{1} \times 57090191,94126593243771907471616 = 74217259,52364571216923479713088$   $\frac{1,3}{1} \times 471623281,79029140303594265339936 = 613110266,3319788246067254494144$   $\frac{1,3}{1} \times 74217259,52364571216923479713088 = 96482437,380739425820005236270144$   $\frac{1,3}{1} \times 613110266,3319788246067254494144 = 797043346,23157247208884308423872$   $\frac{1,3}{1} \times 96482437,380739425820005236270144 = 125427168,594961253566006806151296$   $\frac{1,3}{1} \times 797043346,23157247208884308423872 = 1036156349,101044213715495909500224$   $\frac{1,3}{1} \times 125427168,594961253566006806151296 = 163055319,17346962959380884809664$   $\frac{1,3}{1} \times 1036156349,101044213715495909500224 = 1347003253,83135747782064468235072$   $\frac{1,3}{1} \times 163055319,17346962959380884809664 = 211971914,925510528471951502523776$   $\frac{1,3}{1} \times 1347003253,83135747782064468235072 = 1751104229,980764723166838087055936$   $\frac{1,3}{1} \times 211971914,925510528471951502523776 = 275563489,403163687013536953280896$   $\frac{1,3}{1} \times 1751104229,980764723166838087055936 = 2276435500,974994139916889511192704$   $\frac{1,3}{1} \times 275563489,403163687013536953280896 = 358232536,2241127931156080392731776$   $\frac{1,3}{1} \times 2276435500,974994139916889511192704 = 2959366151,2674923818920563645305216$   $\frac{1,3}{1} \times 358232536,2241127931156080392731776 = 4657022971,913466510502904510651328$   $\frac{1,3}{1} \times 2959366151,2674923818920563645305216 = 3847176096,64773909645967327398976$   $\frac{1,3}{1} \times 4657022971,913466510502904510651328 = 6054139863,48750646335367586336672$   $\frac{1,3}{1} \times 3847176096,64773909645967327398976 = 5001328925,64226082541757525618688$   $\frac{1,3}{1} \times 6054139863,48750646335367586336672 = 7870381822,52595840235973262246848$   $\frac{1,3}{1} \times 5001328925,64226082541757525618688 = 6501727603,33493907304284783303424$   $\frac{1,3}{1} \times 7870381822,52595840235973262246848 = 10231500369,32934572425862514101248$   $\frac{1,3}{1} \times 6501727603,33493907304284783303424 = 8452245884,33542075495572226291712$   $\frac{1,3}{1} \times 10231500369,32934572425862514101248 = 13300950480,128270441532242567332224$   $\frac{1,3}{1} \times 8452245884,33542075495572226291712 = 10987919649,63552781494278989492224$   $\frac{1,3}{1} \times 13300950480,128270441532242567332224 = 17291235624,16675157799393133712896$   $\frac{1,3}{1} \times 10987919649,63552781494278989492224 = 14284295544,526186359485626863398976$   $\frac{1,3}{1} \times 17291235624,16675157799393133712896 = 22478606311,41677101339211073827328$   $\frac{1,3}{1} \times 14284295544,526186359485626863398976 = 18569584207,8840302272913749224128$   $\frac{1,3}{1} \times 22478606311,41677101339211073827328 = 29222188204,841822317$