

11222 204 WO_ST25
SEQUENCE LISTING

<110> Novozymes A/S

<120> Combining BioPolishing and Bleach Clean-up

<130> 11222.204-WO

<160> 3

<170> PatentIn version 3.4

<210> 1

<211> 299

<212> PRT

<213> Thielavia terrestris

<400> 1

Met Arg Ser Thr Pro Val Leu Arg Thr Thr Leu Ala Ala Ala Leu Pro
1 5 10 15

Leu Val Ala Ser Ala Ala Ser Gly Ser Gly Gln Ser Thr Arg Tyr Trp
20 25 30

Asp Cys Cys Lys Pro Ser Cys Ala Trp Pro Gly Lys Ala Ala Val Ser
35 40 45

Gln Pro Val Tyr Ala Cys Asp Ala Asn Phe Gln Arg Leu Ser Asp Phe
50 55 60

Asn Val Gln Ser Gly Cys Asn Gly Gly Ser Ala Tyr Ser Cys Ala Asp
65 70 75 80

Gln Thr Pro Trp Ala Val Asn Asp Asn Leu Ala Tyr Gly Phe Ala Ala
85 90 95

Thr Ser Ile Ala Gly Gly Ser Glu Ser Ser Trp Cys Cys Ala Cys Tyr
100 105 110

Ala Leu Thr Phe Thr Ser Gly Pro Val Ala Gly Lys Thr Met Val Val
115 120 125

Gln Ser Thr Ser Thr Gly Gly Asp Leu Gly Ser Asn Gln Phe Asp Ile
130 135 140

Ala Met Pro Gly Gly Gly Val Gly Ile Phe Asn Gly Cys Ser Ser Gln
145 150 155 160

Phe Gly Gly Leu Pro Gly Ala Gln Tyr Gly Gly Ile Ser Ser Arg Asp
165 170 175

Gln Cys Asp Ser Phe Pro Ala Pro Leu Lys Pro Gly Cys Gln Trp Arg
180 185 190

Phe Asp Trp Phe Gln Asn Ala Asp Asn Pro Thr Phe Thr Phe Gln Gln

195 200 11222 204 WO_ST25 205

Val Gln Cys Pro Ala Glu Ile Val Ala Arg Ser Gly Cys Lys Arg Asn
 210 215 220
 Asp Asp Ser Ser Phe Pro Val Phe Thr Pro Pro Ser Gly Gly Asn Gly
 225 230 235 240
 Gly Thr Gly Thr Pro Thr Ser Thr Ala Pro Gly Ser Gly Gln Thr Ser
 245 250 255
 Pro Gly Gly Gly Ser Gly Cys Thr Ser Gln Lys Trp Ala Gln Cys Gly
 260 265 270
 Gly Ile Gly Phe Ser Gly Cys Thr Thr Cys Val Ser Gly Thr Thr Cys
 275 280 285
 Gln Lys Leu Asn Asp Tyr Tyr Ser Gln Cys Leu
 290 295

<210> 2
 <211> 305
 <212> PRT
 <213> Humicola insolens

<400> 2

Met Arg Ser Ser Pro Leu Leu Arg Ser Ala Val Val Ala Ala Leu Pro
 1 5 10 15
 Val Leu Ala Leu Ala Ala Asp Gly Arg Ser Thr Arg Tyr Trp Asp Cys
 20 25 30
 Cys Lys Pro Ser Cys Gly Trp Ala Lys Lys Ala Pro Val Asn Gln Pro
 35 40 45
 Val Phe Ser Cys Asn Ala Asn Phe Gln Arg Ile Thr Asp Phe Asp Ala
 50 55 60
 Lys Ser Gly Cys Glu Pro Gly Gly Val Ala Tyr Ser Cys Ala Asp Gln
 65 70 75 80
 Thr Pro Trp Ala Val Asn Asp Asp Phe Ala Leu Gly Phe Ala Ala Thr
 85 90 95
 Ser Ile Ala Gly Ser Asn Glu Ala Gly Trp Cys Cys Ala Cys Tyr Glu
 100 105 110
 Leu Thr Phe Thr Ser Gly Pro Val Ala Gly Lys Lys Met Val Val Gln
 115 120 125
 Ser Thr Ser Thr Gly Gly Asp Leu Gly Ser Asn His Phe Asp Leu Asn
 130 135 140

Ile Pro Gly Gly Gly Val Gly Ile Phe Asp Gly Cys Thr Pro Gln Phe
145 150 155 160

Gly Gly Leu Pro Gly Gln Arg Tyr Gly Gly Ile Ser Ser Arg Asn Glu
165 170 175

Cys Asp Arg Phe Pro Asp Ala Leu Lys Pro Gly Cys Tyr Trp Arg Phe
180 185 190

Asp Trp Phe Lys Asn Ala Asp Asn Pro Ser Phe Ser Phe Arg Gln Val
195 200 205

Gln Cys Pro Ala Glu Leu Val Ala Arg Thr Gly Cys Arg Arg Asn Asp
210 215 220

Asp Gly Asn Phe Pro Ala Val Gln Ile Pro Ser Ser Ser Thr Ser Ser
225 230 235 240

Pro Val Asn Gln Pro Thr Ser Thr Ser Thr Thr Ser Thr Ser Thr Thr
245 250 255

Ser Ser Pro Pro Val Gln Pro Thr Thr Pro Ser Gly Cys Thr Ala Glu
260 265 270

Arg Trp Ala Gln Cys Gly Gly Asn Gly Trp Ser Gly Cys Thr Thr Cys
275 280 285

Val Ala Gly Ser Thr Cys Thr Lys Ile Asn Asp Trp Tyr His Gln Cys
290 295 300

Leu
305

<210> 3

<211> 717

<212> PRT

<213> Scytalidium thermophilum

<400> 3

Met Asn Arg Val Thr Asn Leu Leu Ala Trp Ala Gly Ala Ile Gly Leu
1 5 10 15

Ala Gln Ala Thr Cys Pro Phe Ala Asp Pro Ala Ala Leu Tyr Ser Arg
20 25 30

Gln Asp Thr Thr Ser Gly Gln Ser Pro Leu Ala Ala Tyr Glu Val Asp
35 40 45

Asp Ser Thr Gly Tyr Leu Thr Ser Asp Val Gly Gly Pro Ile Gln Asp
50 55 60

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Gln Thr Ser Leu Lys Ala Gly Ile Arg Gly Pro Thr Leu Leu Glu Asp
 65 70 75 80
 Phe Met Phe Arg Gln Lys Ile Gln His Phe Asp His Glu Arg Val Pro
 85 90 95
 Glu Arg Ala Val His Ala Arg Gly Ala Gly Ala His Gly Thr Phe Thr
 100 105 110
 Ser Tyr Ala Asp Trp Ser Asn Ile Thr Ala Ala Ser Phe Leu Asn Ala
 115 120 125
 Thr Gly Lys Gln Thr Pro Val Phe Val Arg Phe Ser Thr Val Ala Gly
 130 135 140
 Ser Arg Gly Ser Ala Asp Thr Ala Arg Asp Val His Gly Phe Ala Thr
 145 150 155 160
 Arg Phe Tyr Thr Asp Glu Gly Asn Phe Asp Ile Val Gly Asn Asn Ile
 165 170 175
 Pro Val Phe Phe Ile Gln Asp Ala Ile Gln Phe Pro Asp Leu Ile His
 180 185 190
 Ser Val Lys Pro Arg Pro Asp Asn Glu Ile Pro Gln Ala Ala Thr Ala
 195 200 205
 His Asp Ser Ala Trp Asp Phe Phe Ser Gln Gln Pro Ser Thr Met His
 210 215 220
 Thr Leu Phe Trp Ala Met Ser Gly His Gly Ile Pro Arg Ser Tyr Arg
 225 230 235 240
 His Met Asp Gly Phe Gly Val His Thr Phe Arg Phe Val Lys Asp Asp
 245 250 255
 Gly Ser Ser Lys Leu Ile Lys Trp His Phe Lys Ser Arg Gln Gly Lys
 260 265 270
 Ala Ser Leu Val Trp Glu Glu Ala Gln Val Leu Ser Gly Lys Asn Ala
 275 280 285
 Asp Phe His Arg Gln Asp Leu Trp Asp Ala Ile Glu Ser Gly Asn Gly
 290 295 300
 Pro Glu Trp Asp Val Cys Val Gln Ile Val Asp Glu Ser Gln Ala Gln
 305 310 315 320
 Ala Phe Gly Phe Asp Leu Leu Asp Pro Thr Lys Ile Ile Pro Glu Glu
 325 330 335

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Tyr Ala Pro Leu Thr Lys Leu Gly Leu Leu Lys Leu Asp Arg Asn Pro
340 345 350

Thr Asn Tyr Phe Ala Glu Thr Glu Gln Val Met Phe Gln Pro Gly His
355 360 365

Ile Val Arg Gly Ile Asp Phe Thr Glu Asp Pro Leu Leu Gln Gly Arg
370 375 380

Leu Phe Ser Tyr Leu Asp Thr Gln Leu Asn Arg Asn Gly Gly Pro Asn
385 390 395 400

Phe Glu Gln Leu Pro Ile Asn Met Pro Arg Val Pro Ile His Asn Asn
405 410 415

Asn Arg Asp Gly Ala Gly Gln Met Phe Ile His Arg Asn Lys Tyr Pro
420 425 430

Tyr Thr Pro Asn Thr Leu Asn Ser Gly Tyr Pro Arg Gln Ala Asn Gln
435 440 445

Asn Ala Gly Arg Gly Phe Phe Thr Ala Pro Gly Arg Thr Ala Ser Gly
450 455 460

Ala Leu Val Arg Glu Val Ser Pro Thr Phe Asn Asp His Trp Ser Gln
465 470 475 480

Pro Arg Leu Phe Phe Asn Ser Leu Thr Pro Val Glu Gln Gln Phe Leu
485 490 495

Val Asn Ala Met Arg Phe Glu Ile Ser Leu Val Lys Ser Glu Glu Val
500 505 510

Lys Lys Asn Val Leu Thr Gln Leu Asn Arg Val Ser His Asp Val Ala
515 520 525

Val Arg Val Ala Ala Ala Ile Gly Leu Gly Ala Pro Asp Ala Asp Asp
530 535 540

Thr Tyr Tyr His Asn Asn Lys Thr Ala Gly Val Ser Ile Val Gly Ser
545 550 555 560

Gly Pro Leu Pro Thr Ile Lys Thr Leu Arg Val Gly Ile Leu Ala Thr
565 570 575

Thr Ser Glu Ser Ser Ala Leu Asp Gln Ala Ala Gln Leu Arg Thr Arg
580 585 590

Leu Glu Lys Asp Gly Leu Val Val Thr Val Val Ala Glu Thr Leu Arg
595 600 605

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Glu	Gly	Val	Asp	Gln	Thr	Tyr	Ser	Thr	Ala	Asp	Ala	Thr	Gly	Phe	Asp
610						615					620				
Gly	Val	Val	Val	Val	Asp	Gly	Ala	Ala	Ala	Leu	Phe	Ala	Ser	Thr	Ala
625					630					635					640
Ser	Ser	Pro	Leu	Phe	Pro	Thr	Gly	Arg	Pro	Leu	Gln	Ile	Phe	Val	Asp
				645					650					655	
Ala	Tyr	Arg	Trp	Gly	Lys	Pro	Val	Gly	Val	Cys	Gly	Gly	Lys	Ser	Ser
			660					665					670		
Glu	Val	Leu	Asp	Ala	Ala	Asp	Val	Pro	Glu	Asp	Gly	Asp	Gly	Val	Tyr
		675					680					685			
Ser	Glu	Glu	Ser	Val	Asp	Met	Phe	Val	Glu	Glu	Phe	Glu	Lys	Gly	Leu
	690					695					700				
Ala	Thr	Phe	Arg	Phe	Thr	Asp	Arg	Phe	Ala	Leu	Asp	Ser			
705					710					715					